



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
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NOTICE OF 30-DAY PERIOD FOR PUBLIC COMMENT

Preliminary Findings Regarding a
Minor Source Operating Permit (MSOP) with New Source Review

for Camp Atterbury Joint Maneuver Training Center in Bartholomew, Brown, and Johnson Counties

Permit No. M081-31782-00042

The Indiana Department of Environmental Management (IDEM) has received an application from Camp Atterbury Joint Maneuver Training Center located at 3008 Hospital Road, Edinburgh, IN 46124 for a MSOP with New Source Review. If approved by IDEM's Office of Air Quality (OAQ), this proposed permit would allow Camp Atterbury Joint Maneuver Training Center to continue operating a stationary designated mobilization and training site for the National Guard and U.S. Army Reserve.

This draft MSOP contains equipment that would emit air pollutants. Some conditions from previously issued permits/approvals have been corrected, changed or removed. These corrections, changes, and removals may include Title I changes. This notice fulfills the public notice procedures to which those conditions are subject. IDEM has reviewed this application, and has developed preliminary findings, consisting of a draft permit and several supporting documents, that would allow the applicant to continue operating its existing source.

Camp Atterbury Joint Maneuver Training Center was issued a Construction Permit (CP) No. 081-7065-00042 on August 22, 1997, for a container reconditioning facility. Pursuant to 326 IAC 2-6.1-3, the source was required to apply for MSOP by June 22, 2002 (90 days prior to the expiration date of September 22, 2002). On April 27, 2012, IDEM, OAQ received an application from Camp Atterbury Joint Maneuver Training Center. IDEM is reviewing this matter and will take the appropriate action. This proposed approval is intended to satisfy the requirements of the operating permit rules.

A copy of the permit application and IDEM's preliminary findings are available at:

Bartholomew County Library Columbus Branch
536 Fifth Street
Columbus, IN 47201

and

Brown County Public Library
205 Locust Lane, PO Box 8
Nashville, IN 47448

and

Johnson County Public Library Franklin Branch
401 State Street
Franklin, IN 46131

A copy of the preliminary findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>.

How can you participate in this process?

The date that this notice is published in a newspaper marks the beginning of a 30-day public comment period. If the 30th day of the comment period falls on a day when IDEM offices are closed for business, all comments must be postmarked or delivered in person on the next business day that IDEM is open.

You may request that IDEM hold a public hearing about this draft permit. If adverse comments concerning the **air pollution impact** of this draft permit are received, with a request for a public hearing, IDEM will decide whether or not to hold a public hearing. IDEM could also decide to hold a public meeting instead of, or in addition to, a public hearing. If a public hearing or meeting is held, IDEM will make a separate announcement of the date, time, and location of that hearing or meeting. At a hearing, you would have an opportunity to submit written comments and make verbal comments. At a meeting, you would have an opportunity to submit written comments, ask questions, and discuss any air pollution concerns with IDEM staff.

Comments and supporting documentation, or a request for a public hearing should be sent in writing to IDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so that you can be added IDEM's mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit application, please contact IDEM at the address below. Please refer to permit number M081-31782-00042 in all correspondence.

Comments should be sent to:

Deena Patton
IDEM, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(800) 451-6027, ask for extension 4-5176
Or dial directly: (317) 234-5400
Fax: (317)-232-6749 attn: Deena Patton
E-mail: DPatton2@idem.in.gov

All comments will be considered by IDEM when we make a decision to issue or deny the permit. Comments that are most likely to affect final permit decisions are those based on the rules and laws governing this permitting process (326 IAC 2), air quality issues, and technical issues. IDEM does not have legal authority to regulate zoning, odor or noise. For such issues, please contact your local officials.

For additional information about air permits and how you can participate, please see IDEM's **Guide for Citizen Participation** and **Permit Guide** on the Internet at: www.idem.in.gov.

What will happen after IDEM makes a decision?

Following the end of the public comment period, IDEM will issue a Notice of Decision stating whether the permit has been issued or denied. If the permit is issued, it may be different than the draft permit because of comments that were received during the public comment period. If comments are received during the public notice period, the final decision will include a document that summarizes the comments and IDEM's response to those comments. If you have submitted comments or have asked to be added to the mailing list, you will receive a Notice of the Decision. The notice will provide details on how you may appeal IDEM's decision, if you disagree with that decision. The final decision will also be available on the Internet at the address indicated above, at the local library indicated above, and the IDEM public file room on the 12th floor of the Indiana Government Center North, 100 N. Senate Avenue, Indianapolis, Indiana 46204-2251.

If you have any questions please contact Ms. Patton or my staff at the above address.



Nathan Bell, Section Chief
Permits Branch
Office of Air Quality



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DRAFT

New Source Review and Minor Source Operating Permit OFFICE OF AIR QUALITY

**Camp Atterbury Joint Maneuver Training Center
3008 Hospital Road
Edinburgh, Indiana 46124**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a MSOP under 326 IAC 2-6.1.

Operation Permit No. M081-31782-00042	
Issued by:	Issuance Date:
Nathan C. Bell, Section Chief Permits Branch Office of Air Quality	Expiration Date:

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 and A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)][326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary designated mobilization and training site for the National Guard.

Source Address:	3008 Hospital Road, Edinburgh, Indiana 46124
General Source Phone Number:	(812) 526-1255
SIC Code:	9711
County Location:	Bartholomew, Brown, and Johnson
Source Location Status:	Nonattainment for PM2.5 standard Attainment for all other criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary

This stationary source consists of the following emission units and pollution control devices:

- (a) Abrasive blasting gloveboxes, used for cleaning automobile parts during equipment maintenance and repair and for paint removal and preparing equipment for spot welding, consisting of:
 - (1) Building 123 abrasive blasting glovebox, identified as AB01, constructed in 2000, with a maximum capacity of 20 pounds of glass bead per year, using filter bags as controls.
 - (2) Building 232 abrasive blasting glovebox, identified as AB02, constructed in 2010, with a maximum capacity of 17 pounds of steel grit per year, using filter bags as controls.
 - (3) Building 627 abrasive blasting glovebox, identified as AB03, constructed in 1997, with a maximum capacity of 25 pounds of boiler slag per year, using filter bags as controls.
 - (4) Building 630 abrasive blasting glovebox, identified as AB04, constructed in 1997, with a maximum capacity of 25 pounds of boiler slag per year, using filter bags as controls.
 - (5) Building 633 abrasive blasting glovebox, identified as AB05, constructed in 1997, with a maximum capacity of 20 pounds of boiler slag per year, using filter bags as controls.
 - (6) Building 232 abrasive blasting glovebox, identified as AB02, constructed in 2010, with a maximum capacity of 17 pounds of steel grit per year, using filter bags as controls.
- (b) Degreasing operations, used to clean weapons following range qualification and automotive parts, consisting of:

- (1) Building 124 degreaser, identified as DG01, constructed in 2000, with a maximum capacity of 35 gallons and maximum usage of 11.7 gallons per year.
- (2) Building 630 System One parts washer degreaser, identified as DG02, constructed in 1997, with a maximum capacity of 30 gallons and maximum usage of 10.00 gallons per year.
- (3) Building 630 Recycle-Kleen parts washer degreaser, identified as DG03, constructed in 2010, with a maximum capacity of 20 gallons and a maximum usage of 6.70 gallons per year.
- (4) Building 630 Zep solvent recycler degreaser, identified as DG04, constructed in 2002, with a maximum capacity of 5 gallons and a maximum usage of 1.70 gallons per year.
- (5) Building 633 Inland Technology degreaser, identified as DG05, constructed in 1998, with a maximum capacity of 55 gallons and a maximum usage of 18.30 gallons per year.
- (6) Building 633 Recycle-Kleen parts washer degreaser, identified as DG06, constructed in 2012, with a maximum capacity of 20 gallons and a maximum usage of 6.70 gallons per year.
- (7) Building 633 Zep degreaser, identified as DG07, constructed in 2010, with a maximum capacity of 45 gallons and a maximum usage of 15.00 gallons per year.
- (8) Building 655 Inland Technology degreaser, identified as DG08, constructed in 2011, with a maximum capacity of 5 gallons and a maximum usage of 1.70 gallons per year.
- (9) Building 710 Zep degreaser, identified as DG09, constructed in 2010, with a maximum capacity of 45 gallons and a maximum usage of 15.00 gallons per year.
- (10) Building 10411 Inland Technology degreaser, identified as DG10, constructed in 2002, with a maximum capacity of 20 gallons and a maximum usage of 6.70 gallons per year.
- (11) Building 12411 Inland Technology degreaser, identified as DG11, constructed in 2002, with a maximum capacity of 20 gallons and a maximum usage of 6.70 gallons per year.
- (12) Building 14112 Inland Technology degreaser, identified as DG12, constructed in 2002, with a maximum capacity of 20 gallons and a maximum usage of 6.70 gallons per year.
- (13) Building 18411 Inland Technology degreaser, identified as DG13, constructed in 2002, with a maximum capacity of 20 gallons and a maximum usage of 6.70 gallons per year.
- (14) Building 21113 Inland Technology degreaser, identified as DG14, constructed in 2002, with a maximum capacity of 20 gallons and a maximum usage of 6.70 gallons per year.
- (15) Building T0808 degreaser, identified as DG15, constructed in 2008, with a maximum capacity of 7 gallons and a maximum usage of 2.30 gallons per year.

(c) Two (2) closed landfills, including:

- (1) Landfill 01, a closed landfill that accepted municipal solid waste from 1971 to 1993, containing 987,529 cubic meters of waste, and exhausting to landfill vents. This landfill has a design capacity less than 2.5 million megagrams (Mg) of waste.
- (2) Landfill 02, a closed landfill that accepted construction waste from 1953 to 1970, containing 20 acres of waste, with no landfill vents, and exhausting fugitive emissions to the atmosphere. This landfill has a design capacity less than 2.5 million megagrams (Mg) of waste.

Landfill 01 and 02 are considered affected facilities under New Source Performance Standards for Emission Compliance Times for Municipal Solid Waste Landfills (40 CFR 60, Subpart Cc)

(d) Surface coating operations, including:

- (1) Building 630 paint spray booth, identified as PSB01, conducting manual and spray painting touch-up of vehicles, constructed in 1997, with a maximum capacity of 1.0 gallon per week, with a filter wall for particulate control, exhausting to stacks S630a and S630b.
- (2) Building 232 open front bench booth, identified as PH01, constructed in 2010, with a maximum capacity of 0.50 gallon per week, painting small items such as doors and plaques, utilizing a paint hood with filters for particulate control, exhausting to stack S232a.

(e) Vehicle fuel dispensing tanks, including:

- (1) Three (3) UST vehicle fuel dispensing operations, identified as VFD01, VFD02, and VFD03, constructed in 1991, each has a storage capacity of less than 39,000 gallons of jet fuel (JP8), with a combined maximum throughput of 675,080 gallons per year.
- (2) One (1) UST gasoline dispensing operation, identified as VFD04, constructed in 1991, has a storage capacity of less than 39,000 gallons, with a maximum throughput of 159,019 gallons per year.
- (3) One (1) AST fuel dispensing operation, identified as VFD05, constructed in 1997, with a maximum storage capacity of 1,000 gallons of off-spec JP8 or gasoline.
- (4) One (1) AST JP8 dispensing operation, identified as VFD06, constructed in 2011, with a maximum storage capacity of 750 gallons, with a maximum throughput of 750 gallons per year.
- (5) One (1) AST gasoline dispensing operation, identified as VFD07, constructed in 2011, with a maximum capacity of 250 gallons, with a maximum throughput of 250 gallons per year.
- (6) One (1) AST JP8 dispensing operation, identified as VFD08, constructed in 2007, has a storage capacity of less than 39,000 gallons with a maximum throughput of 12,198 gallons per year.

VFD04 and VFD07 are considered affected facilities under National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Category: Gasoline Dispensing Facilities (40 CFR 63, Subpart CCCCCC).

- (f) Used oil storage tanks, including:
 - (1) Used Oil Storage tanks UOil03 and UOil04, constructed in 1990, each with a storage capacity of 1,000 gallons, with a combined maximum throughput of 1,450 gallons per year.
 - (2) Used Oil Storage tank UOil05, constructed in 1990, with a storage capacity of 1,000 gallons and a maximum throughput of 850 gallons per year.
 - (3) Used oil storage tanks UOil01 and UOil02, constructed in 2009, each with a storage capacity of 500 gallons, with a combined maximum throughput of 3,300 gallons per year.
- (g) Welding and torch cutting operations, including:
 - (1) Building 711 oxyacetylene torch, identified as WEL30, constructed in 1990, with a maximum capacity of 1.0 foot per minute.
 - (2) Building T0801 oxyacetylene torch, identified as WEL31, constructed in 1990, with a maximum capacity of 1.0 foot per minute.
 - (3) Building 123 MIG welder, identified as WEL32, constructed in 1992, with a maximum capacity of 5.20 pounds per year.
 - (4) Building 123 oxyacetylene torch, identified as WEL33, constructed in 1996, with a maximum capacity of 1.0 foot per minute.
 - (5) Building 121 electric arc welder, identified as WEL01, constructed in 1999, with a maximum capacity of 0.70 pounds per year.
 - (6) Building 124 MIG welder, identified as WEL02, constructed after 1997, with a maximum capacity of 7.80 pounds per year.
 - (7) Building 232 electric arc welder, identified as WEL03, constructed in 2004, with a maximum capacity of 3.60 pounds per year.
 - (8) Building 232 MIG welder, identified as WEL04, constructed in 2004, with a maximum capacity of 3.60 pounds per year.
 - (9) Building 510 MIG welder, identified as WEL05, constructed in 2006, with a maximum capacity of 7.80 pounds per year.
 - (10) Building 624 MIG welder, identified as WEL06, constructed in 2003, with a maximum capacity of 7.80 pounds per year.
 - (11) Building 625 MIG welder, identified as WEL07, constructed in 2005, with a maximum capacity of 20.80 pounds per year.
 - (12) Building 627 MIG welder, identified as WEL08, constructed in 2011, with a maximum capacity of 10.40 pounds per year.
 - (13) Building 630 MIG welder, identified as WEL09, constructed in 2008, with a maximum capacity of 20.80 pounds per year.
 - (14) Building 630 MIG welder, identified as WEL10, constructed in 2004, with a maximum capacity of 2.10 pounds per year.

- (15) Building 633 MIG welder, identified as WEL11, constructed in 2005, with a maximum capacity of 5.20 pounds per year.
- (16) Building 633 stick welder, identified as WEL12, constructed in 2011, with a maximum capacity of 2.60 pounds per year.
- (17) Building 655 MIG welder, identified as WEL13, constructed in 2011, with a maximum capacity of 7.80 pounds per year.
- (18) Building 711 MIG welder, identified as WEL14, constructed in 2008, with a maximum capacity of 7.80 pounds per year.
- (19) Building 40134 stick welder, identified as WEL15, constructed in 2011, with a maximum capacity of 0.50 pounds per year.
- (20) Building 232 oxyacetylene torch, identified as WEL16, constructed in 2010, with a maximum capacity of 1.0 foot per minute.
- (21) Building 232 oxyacetylene torch, identified as WEL17, constructed in 2010, with a maximum capacity of 1.0 foot per minute.
- (22) Building 232 plasma cutter, identified as WEL18, constructed in 2009, with a maximum capacity of 0.30 foot per minute.
- (23) Building 510 oxyacetylene torch, identified as WEL19, constructed after 1997, with a maximum capacity of 1.0 foot per minute.
- (24) Building 624 plasma cutter, identified as WEL20, constructed in 2009, with a maximum capacity of 0.20 foot per minute.
- (25) Building 624 oxyacetylene torch, identified as WEL21, constructed in 2009, with a maximum capacity of 1.0 foot per minute.
- (26) Building 625 plasma cutter, identified as WEL22, constructed in 2005, with a maximum capacity of 0.20 foot per minute.
- (27) Building 625 oxyacetylene torch, identified as WEL23, constructed in 2005, with a maximum capacity of 1.0 foot per minute.
- (28) Building 627 oxyacetylene torch, identified as WEL24, constructed after 1997, with a maximum capacity of 1.0 foot per minute.
- (29) Building 630 plasma cutter, identified as WEL25, constructed in 2003, with a maximum capacity of 0.20 foot per minute.
- (30) Building 630 oxyacetylene torch, identified as WEL26, constructed after 1997, with a maximum capacity of 1.0 foot per minute.
- (31) Building 633 oxyacetylene torch, identified as WEL27, constructed after 1997, with a maximum capacity of 1.0 foot per minute.
- (32) Building 655 oxyacetylene torch, identified as WEL28, constructed in 2011, with a maximum capacity of 1.0 foot per minute.
- (33) Building 711 plasma torch, identified as WEL29, constructed in 2005, with a maximum capacity of 0.20 foot per minute.

- (34) Building 250 oxyacetylene torch, identified as WEL34, approved for construction in 2013, with a maximum capacity of 1.0 foot per minute.
- (h) Twelve (12) natural gas-fired boilers with a combined maximum heat input capacity of 14.84 MMBtu per hour, with maximum capacities ranging from 0.3 to 1.01 MMBtu/hour, constructed from 1996 to 2009.
- (i) Four hundred and eighty-one (481) natural gas-fired heaters with a combined maximum heat input capacity of 66.65 MMBtu per hour, with maximum capacity ranging from 0.01 to 0.99 MMBtu/hour.
- (j) One hundred and twelve (112) propane heaters, constructed after 1997, with a total maximum heat input capacity of up to 23.157 million British thermal units per hour (MMBtu/hr), where each individual combustion source has a heat input of less than 10 MMBtu/hr.
- (k) Emergency generators, including:
 - (1) Building 610 jet fuel-fired emergency generator, identified as GEN01, manufactured in 1974, installed in 2004, with a maximum heat input capacity of 80.4 HP.
 - (2) Building 40174 jet fuel-fired emergency generator, identified as GEN02, manufactured in 1983, installed in 2009, with a maximum heat input capacity of 80.4 HP.
 - (3) Building 2 jet fuel-fired emergency generator, identified as GEN03, manufactured in 1999, installed in 2010, with a maximum heat input capacity of 107.3 HP.
 - (4) Building 1 jet fuel-fired emergency generator, identified as GEN04, manufactured in 1999, installed in 2010, with a maximum heat input capacity of 107.3 HP.
 - (5) Building 225 jet fuel-fired emergency generator, identified as GEN05, manufactured in 1999, installed in 2010, with a maximum heat input capacity of 107.3 HP.
 - (6) Building 26411 propane-fired emergency generator, identified as GEN06, manufactured in 2011, installed in 2011, with a maximum heat input capacity of 40.2 HP.

GEN06 is considered an affected facility under New Source Performance Standards for Stationary Spark Ignition Internal Combustion Engines (40 CFR 60, Subpart JJJJ)
 - (7) Building 7 jet fuel-fired emergency generator, identified as GEN07, manufactured after April 1, 2006, installed in 2011, with a maximum heat input capacity of 134.1 HP.
 - (8) Building 433 natural gas-fired emergency generator, identified as GEN08, manufactured in February 2007, installed in 2011, with a maximum heat input capacity of 9.4 HP.
 - (9) Building 343 natural gas-fired emergency generator, identified as GEN09, manufactured in March 2008, installed in 2011, with a maximum heat input capacity of 9.4 HP.
 - (10) Building 7 jet fuel-fired emergency generator, identified as GEN10, manufactured in June 2002, installed in 2011, with a maximum heat input capacity of 67.1 HP.

- (11) Building 40180 natural gas-fired emergency generator, identified as GEN11, manufactured in October 2005, installed in 2011, with a maximum heat input capacity of 80.4 HP.
- (12) Building 3 jet fuel-fired emergency generator, identified as GEN12, manufactured after April 1, 2006, installed in 2011, with a maximum heat input capacity of 134.1 HP.
- (13) Building 127 jet fuel-fired emergency generator, identified as GEN13, manufactured after April 1, 2006, installed in 2011, with a maximum heat input capacity of 134.1 HP.
- (14) Building 40174 jet fuel-fired emergency generator, identified as GEN14, manufactured in June 2010, installed in 2010, with a maximum heat input capacity of 67.1 HP.
- (15) East Water Tower Building jet fuel-fired emergency generator, identified as GEN15, manufactured prior to 2005, installed in 2005, with a maximum heat input capacity of 26.8 HP.
- (16) Building 40134 jet fuel-fired emergency generator, identified as GEN16, manufactured after April 1, 2006, installed in 2011, with a maximum heat input capacity of 80.4 HP.
- (17) Building 40203 jet fuel-fired emergency generator, identified as GEN17, manufactured after April 1, 2006, installed in 2009, with a maximum heat input capacity of 80.4 HP.

GEN07, GEN12, GEN13, GEN14, GEN16 and GEN17 are considered affected facilities under New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines (40 CFR 60, Subpart IIII).

GEN02 through GEN05, GEN07, GEN06, GEN08, GEN09, GEN10, GEN11, GEN12 through GEN14, GEN16 and GEN17 are considered new affected facilities under the 40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants (NESHAP).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-1.1-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-1.1-1) shall prevail.

B.2 Permit Term [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

- (a) This permit, M081-31782-00042, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

B.3 Term of Conditions [326 IAC 2-1.1-9.5]

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

- (a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or
- (b) the emission unit to which the condition pertains permanently ceases operation.

B.4 Enforceability

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Severability

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege

This permit does not convey any property rights of any sort or any exclusive privilege.

B.7 Duty to Provide Information

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.

- (b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

- (c) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

B.9 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:

- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
- (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The Permittee shall implement the PMPs.

- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions.
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.10 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of permits established prior to M081-31782-00042 and issued pursuant to permitting programs approved into the state implementation plan have been either:
- (1) incorporated as originally stated,
 - (2) revised, or

(3) deleted.

(b) All previous registrations and permits are superseded by this permit.

B.11 Termination of Right to Operate [326 IAC 2-6.1-7(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least one hundred twenty (120) days prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-6.1-7.

B.12 Permit Renewal [326 IAC 2-6.1-7]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-6.1-7. Such information shall be included in the application for each emission unit at this source. The renewal application does require an affirmation that the statements in the application are true and complete by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(b) A timely renewal application is one that is:

- (1) Submitted at least one hundred twenty (120) days prior to the date of the expiration of this permit; and
- (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-6.1 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-6.1-4(b), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.13 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

- (c) The Permittee shall notify the OAQ no later than thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

B.14 Source Modification Requirement

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2.

B.15 Inspection and Entry

[326 IAC 2-5.1-3(e)(4)(B)][326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.16 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]

- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require an affirmation that the statements in the application are true and complete by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement notice-only changes addressed in the request for a notice-only change immediately upon submittal of the request. [326 IAC 2-6.1-6(d)(3)]

B.17 Annual Fee Payment [326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees due no later than thirty (30) calendar days of receipt of a bill from IDEM, OAQ,.

- (b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.18 Credible Evidence [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-1 (Applicability) and 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

C.6 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project.

- (e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

- (g) Indiana Licensed Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

Testing Requirements [326 IAC 2-6.1-5(a)(2)]

C.8 Performance Testing [326 IAC 3-6]

- (a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:
- Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- no later than thirty-five (35) days prior to the intended test date.
- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date.
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.9 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]

C.10 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.11 Instrument Specifications [326 IAC 2-1.1-11]

- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.
- (b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

Corrective Actions and Response Steps

C.12 Response to Excursions or Exceedances

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

- (a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or
 - (3) any necessary follow-up actions to return operation to normal or usual manner of operation.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records; and/or
 - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall record the reasonable response steps taken.

C.13 Actions Related to Noncompliance Demonstrated by a Stack Test

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.
- (b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

C.14 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.15 General Record Keeping Requirements [326 IAC 2-6.1-5]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

C.16 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) Reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) The first report shall cover the period commencing on the date of issuance of this permit or the date of initial start-up, whichever is later, and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit, "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

SECTION D.1

OPERATION CONDITIONS

Facility Description [326 IAC 2-5.1-2(f)(2)] [326 IAC 2-5.5-4(a)(2)]:

- (b) Degreasing operations, used to clean weapons following range qualification and automotive parts, consisting of:
- (1) Building 124 degreaser, identified as DG01, constructed in 2000, with a maximum capacity of 35 gallons and maximum usage of 11.7 gallons per year.
 - (2) Building 630 System One parts washer degreaser, identified as DG02, constructed in 1997, with a maximum capacity of 30 gallons and maximum usage of 10.00 gallons per year.
 - (3) Building 630 Recycle-Kleen parts washer degreaser, identified as DG03, constructed in 2010, with a maximum capacity of 20 gallons and a maximum usage of 6.70 gallons per year.
 - (4) Building 630 Zep solvent recycler degreaser, identified as DG04, constructed in 2002, with a maximum capacity of 5 gallons and a maximum usage of 1.70 gallons per year.
 - (5) Building 633 Inland Technology degreaser, identified as DG05, constructed in 1998, with a maximum capacity of 55 gallons and a maximum usage of 18.30 gallons per year.
 - (6) Building 633 Recycle-Kleen parts washer degreaser, identified as DG06, constructed in 2012, with a maximum capacity of 20 gallons and a maximum usage of 6.70 gallons per year.
 - (7) Building 633 Zep degreaser, identified as DG07, constructed in 2010, with a maximum capacity of 45 gallons and a maximum usage of 15.00 gallons per year.
 - (8) Building 655 Inland Technology degreaser, identified as DG08, constructed in 2011, with a maximum capacity of 5 gallons and a maximum usage of 1.70 gallons per year.
 - (9) Building 710 Zep degreaser, identified as DG09, constructed in 2010, with a maximum capacity of 45 gallons and a maximum usage of 15.00 gallons per year.
 - (10) Building 10411 Inland Technology degreaser, identified as DG10, constructed in 2002, with a maximum capacity of 20 gallons and a maximum usage of 6.70 gallons per year.
 - (11) Building 12411 Inland Technology degreaser, identified as DG11, constructed in 2002, with a maximum capacity of 20 gallons and a maximum usage of 6.70 gallons per year.
 - (12) Building 14112 Inland Technology degreaser, identified as DG12, constructed in 2002, with a maximum capacity of 20 gallons and a maximum usage of 6.70 gallons per year.
 - (13) Building 18411 Inland Technology degreaser, identified as DG13, constructed in 2002, with a maximum capacity of 20 gallons and a maximum usage of 6.70 gallons per year.
 - (14) Building 21113 Inland Technology degreaser, identified as DG14, constructed in 2002, with a maximum capacity of 20 gallons and a maximum usage of 6.70 gallons per year.
 - (15) Building T0808 degreaser, identified as DG15, constructed in 2008, with a maximum capacity of 7 gallons and a maximum usage of 2.30 gallons per year.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Degreaser Control Equipment and Operating Requirements), the Permittee shall comply with the following:

- (a) For each cold cleaning degreaser constructed after January 1, 1980, the Permittee shall ensure the following control equipment and operating requirements are met:
 - (1) Equip the degreaser with a cover;
 - (2) Equip the degreaser with a device for draining cleaned parts;
 - (3) Close the degreaser cover whenever parts are not being handled in the degreaser;
 - (4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
 - (5) Provide a permanent, conspicuous label that lists the operating requirements in subdivisions (3), (4), (6), and (7).
 - (6) Store waste solvent only in closed containers.
 - (7) Prohibit the disposal or transfer of waste solvent in such a manner that could allow greater than twenty percent (20%) of the waste solvent (by weight) to evaporate into the atmosphere.
- (b) For each cold cleaner degreaser without a remote solvent reservoir that was constructed after July 1, 1990, the Permittee shall ensure the following additional control equipment and operating requirements are met:
 - (1) Equip the degreaser with one (1) of the following control devices if the solvent is heated to a temperature of greater than forty-eight and nine-tenths (48.9) degrees Celsius (one hundred twenty (120) degrees Fahrenheit):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent used is insoluble in, and heavier than water.
 - (C) A refrigerated chiller.
 - (D) Carbon adsorption.
 - (E) An alternative system of demonstrated equivalent or better control as those outlined in clauses (i) through (iv) that is approved by the department. An alternative system shall be submitted to the US EPA as a SIP revision.
 - (2) Ensure the degreaser cover is designed so that it can be easily operated with one (1) hand if the solvent is agitated or heated.
 - (3) If used, solvent spray:
 - (A) must be solid, fluid stream; and
 - (B) shall be applied at a pressure that does not cause excessive splashing.

SECTION D.2

OPERATION CONDITIONS

Facility Description [326 IAC 2-5.1-2(f)(2)] [326 IAC 2-5.5-4(a)(2)]:

(c) Two (2) closed landfills, including:

- (1) Landfill 01, a closed landfill that accepted municipal solid waste from 1971 to 1993, containing 987,529 cubic meters of waste, and exhausting to landfill vents. This landfill has a design capacity less than 2.5 million megagrams (Mg) of waste.
- (2) Landfill 02, a closed landfill that accepted construction waste from 1953 to 1970, containing 20 acres of waste, with no landfill vents, and exhausting fugitive emissions to the atmosphere. This landfill has a design capacity less than 2.5 million megagrams (Mg) of waste.

Landfill 01 and 02 are considered affected facilities under New Source Performance Standards for Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills (40 CFR 60, Subpart Cc)

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

D.2.1 General Provisions Relating to New Source Performance Standards (NSPS) [40 CFR Part 60, Subpart A][326 IAC 12-1]

The Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1, for the two (2) landfills, identified as Landfill 01 and Landfill 02.

D.2.2 New Source Performance Standards (NSPS) for Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills [40 CFR Part 60, Subpart Cc] [326 IAC 12]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart Cc (included as Attachment D of this permit), which are incorporated by reference as 326 IAC 12, for the two (2) landfills, identified as Landfill 01 and Landfill 02:

- (1) 40 CFR 60.30c
- (2) 40 CFR 60.31c
- (3) 40 CFR 60.32c
- (4) 40 CFR 60.33c (d)
- (5) 40 CFR 60.34c
- (6) 40 CFR 60.35c (a)
- (7) 40 CFR 60.36c (a)

D.2.3 Municipal Solid Waste Landfills Not Located in Clark, Floyd, Lake, and Porter Counties [326 IAC 8-8.1-1]

The Permittee shall comply with the requirements of 326 IAC 8-8.1, for the one (1) landfill, identified as Landfill 01, and shall comply with the following requirements under 40 CFR 60, Subpart WWW, Standards of Performance for Municipal Solid Waste Landfills:

- (1) 40 CFR 60.751
- (2) 40 CFR 60.752
- (3) 40 CFR 60.753
- (4) 40 CFR 60.754
- (5) 40 CFR 60.755
- (6) 40 CFR 60.756
- (7) 40 CFR 60.757
- (8) 40 CFR 60.758
- (9) 40 CFR 60.759

SECTION D.3

OPERATION CONDITIONS

Facility Description [326 IAC 2-5.1-2(f)(2)] [326 IAC 2-5.5-4(a)(2)]:

(e) Vehicle fuel dispensing tanks, including:

- (2) One (1) UST gasoline dispensing operation, identified as VFD04, constructed in 1991, has a storage capacity of less than 39,000 gallons, with a maximum throughput of 159,019 gallons per year.
- (5) One (1) AST gasoline dispensing operation, identified as VFD07, constructed in 2011, with a maximum capacity of 250 gallons, with a maximum throughput of 250 gallons per year.

VFD04 and VFD07 are considered affected facilities under National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Category: Gasoline Dispensing Facilities (40 CFR 63, Subpart CCCCCC).

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

D.3.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1][40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.11130, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1, as specified in Table 3 of 40 CFR Part 63, Subpart CCCCCC in accordance with schedule in 40 CFR 63 Subpart CCCCCC.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

D.3.2 National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Category: Gasoline Dispensing Facilities [40 CFR Part 63, Subpart CCCCCC]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart CCCCCC (included as Attachment E of this permit), for the one (1) gasoline vehicle fuel dispensing units, identified as VFD04:

- (1) 40 CFR 63.11110
- (2) 40 CFR 63.11111(a), (c), (e), (f), (h), (i), (j), (k)
- (3) 40 CFR 63.11112(a), (d)
- (4) 40 CFR 63.11113(b)
- (5) 40 CFR 63.11115
- (6) 40 CFR 63.11117
- (7) 40 CFR 63.11124(a)
- (8) 40 CFR 63.11125(d)
- (9) 40 CFR 63.11126(b)
- (10) 40 CFR 63.11130
- (11) 40 CFR 63.11131
- (12) 40 CFR 63.11132
- (13) Table 3

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart CCCCCC (included as Attachment E of this permit), for the one (1) gasoline vehicle fuel dispensing units, identified as VFD07:

- (1) 40 CFR 63.11110
- (2) 40 CFR 63.11111(a), (b), (e), (f), (h), (i), (j), (k)
- (3) 40 CFR 63.11112(a), (b)
- (4) 40 CFR 63.11113(a)
- (5) 40 CFR 63.11115
- (6) 40 CFR 63.11116
- (7) 40 CFR 63.11124
- (8) 40 CFR 63.11125(d)
- (9) 40 CFR 63.11126(b)
- (10) 40 CFR 63.11130
- (11) 40 CFR 63.11131
- (12) 40 CFR 63.11132
- (13) Table 3

D.3.3 Gasoline Dispensing Facilities [326 IAC 8-4-6]

The Permittee shall comply with the following provisions of 326 IAC 8-4-6, for the one (1) gasoline vehicle fuel dispensing unit, identified as VFD04:

- (1) No owner or operator of a gasoline dispensing facility shall allow the transfer of gasoline between any transport and any storage tank unless the tank is equipped with the following:
 - (A) A submerged fill pipe that extends to not more than:
 - (i) twelve (12) inches from the bottom of the storage tank if the fill pipe was installed on or before November 9, 2006; or
 - (ii) six (6) inches from the bottom of the storage tank if the fill pipe was installed after November 9, 2006.
 - (B) Either a pressure relief valve set to release at not less than seven-tenths (0.7) pounds per square inch or an orifice of five-tenths (0.5) inch in diameter.
 - (C) A vapor balance system connected between the tank and the transport operating according to manufacturer's specifications.
- (2) If the owner or employees of the owner of a gasoline dispensing facility are not present during loading, it shall be the responsibility of the owner or the operator of the transport to make certain the vapor balance system is:
 - (A) connected between the transport and the storage tank; and
 - (B) operating according to manufacturer's specifications.

D.3.4 Leaks From Transports and Vapor Collection Systems; Records [326 IAC 8-4-9]

Pursuant to 326 IAC 8-4-9, the Permittee shall comply with the following requirements for VFD04 and associated vapor balance, collection, and control systems:

- (a) No person shall allow a gasoline transport that is subject to this rule and that has a capacity of two thousand (2,000) gallons or more to be filled or emptied unless the gasoline transport completes the following:

- (1) Annual leak detection testing before the end of the twelfth (12th) calendar month following the previous year's test, according to test procedure contained in 40 CFR 63.425(e), as follows:
 - (A) Conduct the pressure and vacuum tests for the transport's cargo tank using a time period of five (5) minutes. The initial pressure for the pressure test shall be four hundred sixty (460) millimeters H₂O (eighteen (18) inches H₂O) gauge. The initial vacuum for the vacuum test shall be one hundred fifty (150) millimeters H₂O (six (6) inches H₂O) gauge. The maximum allowable pressure or vacuum change is twenty-five (25) millimeters H₂O (one (1) inch H₂O) in five (5) minutes.
 - (B) Conduct the pressure test of the cargo tank's internal vapor valve as follows:
 - (i) After completing the test under clause (A) of this condition, use the procedures in 40 CFR 60, Appendix A, Method 27 to repressurize the tank to four hundred sixty (460) millimeters H₂O (eighteen (18) inches H₂O) gauge. Close the transport's internal vapor valve or valves, thereby isolating the vapor return line and manifold from the tank.
 - (ii) Relieve the pressure in the vapor return line to atmospheric pressure, then reseal the line. After five (5) minutes, record the gauge pressure in the vapor return line and manifold. The maximum allowable five (5) minute pressure increase is one hundred thirty (130) millimeters H₂O (five (5) inches H₂O).
 - (2) Repairs by the gasoline transport owner or operator, if the transport does not meet the criteria of subsection (a)(1) of this condition, and retesting to prove compliance with the criteria of subsection (a)(1) of this condition.
- (b) The annual test data remain valid until the end of the twelfth (12th) calendar month following the test. The owner of the gasoline transport shall be responsible for compliance with subsection (a) of this condition and shall provide the owner of the loading facility with the most recent valid modified 40 CFR 60, Appendix A, Method 27 test results upon request. The owner of the loading facility shall take all reasonable steps, including reviewing the test date and tester's signature, to ensure that gasoline transports loading at its facility comply with subsection (a) of this condition.
- (c) The Permittee shall:
- (1) Design and operate the applicable system and the gasoline loading equipment in a manner that prevents:
 - (A) Gauge pressure from exceeding four thousand five hundred (4,500) Pascal's (eighteen (18) inches of H₂O) and a vacuum from exceeding one thousand five hundred (1,500) Pascal's (six (6) inches of H₂O) in the gasoline transport;
 - (B) A reading equal to or greater than twenty one thousand (21,000) parts per million as propane, from all points on the perimeter of a potential leak source when measured by the method referenced in 40 CFR 60 Appendix A, Method 21, or an equivalent procedure approved by the commissioner during loading or unloading operations at gasoline dispensing facilities, bulk plants, and bulk terminals; and

- (C) Avoidable visible liquid leaks during loading or unloading operations at gasoline dispensing facilities, bulk plants, and bulk terminals.
- (2) Within fifteen (15) days, repair and retest a vapor balance, collection, or control system that exceeds the limits in subsection (c)(1) of this condition.
- (d) The department may, at any time, monitor a gasoline transport, vapor balance, or vapor control system to confirm continuing compliance with subsection (a) of this condition.
- (e) If the commissioner allows alternative test procedures, such method shall be submitted to the U.S. EPA as a SIP revision.
- (f) During compliance tests conducted under 326 IAC 3-6 (stack testing), each vapor balance or control system shall be tested applying the standards described in subsection (c)(1)(B) of this condition. Testers shall use 40 CFR 60, Appendix A, Method 21 to determine if there are any leaks from the hatches and the flanges of the gasoline transports. If any leak is detected, the transport cannot be used for the capacity of the compliance test of the bulk gas terminal. The threshold for leaks shall be ten thousand (10,000) parts per million methane.

D.3.5 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan is required for VFD04 and associated devices. Section B -- Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.3.6 Vapor Balance, Collection, and Control System Operation [326 IAC 8-4-6][326 IAC 8-4-9]

In order to comply with Conditions D.3.3 and D.3.4, all vapor balance, collection, and control systems required by Conditions D.3.3 and D.3.4 shall be in operation at all times when gasoline is being transferred or dispensed.

D.3.7 Testing Requirements [326 IAC 8-4-6(l)][326 IAC 8-4-9(h)][326 IAC 8-4-9(i)][326 IAC 2-1.1-11]

The Permittee shall perform all testing as required in order to comply with Condition D.3.3(1) and Condition D.3.4 subsections (c), (d), (e), and (f).

Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

D.3.8 Record Keeping Requirements [326 IAC 8-4-6][326 IAC 8-4-9]

- (a) Upon request by the agency, the owner or operator of a gasoline dispensing facility which claims to be exempt from the requirements of 326 IAC 8-4-6 shall submit records to the agency within thirty (30) calendar days from the date of the request which demonstrates that the gasoline dispensing facility is in fact exempt.
- (b) To document the compliance status with Condition D.3.4, the owner or operator of a vapor balance or vapor control system subject to this section shall maintain records of all certification testing. The records shall identify the following:
 - (1) The vapor balance, vapor collection, or vapor control system.
 - (2) The date of the test and, if applicable, retest.
 - (3) The results of the test and, if applicable, retest.
- (c) To document the compliance status with Condition D.3.4, the owner or operator of a gasoline transport subject to this section shall keep a legible copy of the transport's most recent valid annual modified 40 CFR 60, Appendix A, Method 27 test either in the cab of the transport or affixed to the transport trailer. The test record shall identify the following:

- (1) The gasoline transport.
- (2) The type and date of the test and, if applicable, date of retest.
- (3) The test methods, test data, and results certified as true, accurate, and in compliance with this rule by the person who performs the test.

This copy shall be made available immediately upon request to the department and to the owner of the loading facility for inspection and review. The department shall be allowed to make copies of the test results.

- (d) To document the compliance status with Condition D.3.4, the Permittee shall maintain records of the following:
 - (1) Certification testing required, if using an alternative testing procedure, as allowed under Condition D.3.4(e).
 - (2) Test required under Condition D.3.4(f).
- (e) Section C - General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.

SECTION D.4 OPERATION CONDITIONS

Facility Description [326 IAC 2-5.1-2(f)(2)] [326 IAC 2-5.5-4(a)(2)]:

- (i) Twelve (12) natural gas-fired boilers with a combined maximum heat input capacity of 14.84 MMBtu per hour, with maximum capacities ranging from 0.3 to 1.01 MMBtu/hour, constructed from 1996 to 2009.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

D.4.1 Particulate Emissions [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-1(d), the twelve (12) natural gas fired boilers are all subject to 326 IAC 6-2-4, because they were all constructed after September 21, 1983 and shall be limited as specified in the following table:

When $Q < 10$ MMBtu per hour, Pt shall not exceed 0.6

When $10 < Q \leq 10,000$ MMBtu per hour, $Pt = \frac{1.09}{Q^{0.26}}$

Where Q = Total source maximum operating capacity in MMBtu/hr heat input and,

Pt = pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input.

Emission Unit/ID	Construction Date	Q (MMBtu/hr)	Pt (lb/MMBtu)
Training Institute/ Series # 7.0	1996	1.01	0.6
Training Institute/ Series # 9.4	1996	$1.01 + 0.81 = 1.82$	0.6
Conference Center/2-95938	2004	$1.01 + 0.81 + 0.14025 = 1.96$	0.6
Conference Center/2-95942	2004	$1.01 + 0.81 + 0.14025 + 0.14025 = 2.1$	0.6
King's Hall/ 95939	2004	$1.01 + 0.81 + 0.14025 + 0.14025 + 1.26 = 3.36$	0.6
King's Hall/ 95932	2004	$1.01 + 0.81 + 0.14025 + 0.14025 + 1.26 + 0.28 = 3.64$	0.6
CAMCCO/ 223517	2005	$1.01 + 0.81 + 0.14025 + 0.14025 + 1.26 + 0.28 + 4.2 = 7.84$	0.6
CAMCCO/ 223518	2005	$1.01 + 0.81 + 0.14025 + 0.14025 + 1.26 + 0.28 + 4.2 + 4.2 = 12.04$	0.57
CAMCCO/ G-05-0277	2005	$1.01 + 0.81 + 0.14025 + 0.14025 + 1.26 + 0.28 + 4.2 + 4.2 + 1.0 = 13.04$	0.56
CAMCCO/ G-05-0278	2005	$1.01 + 0.81 + 0.14025 + 0.14025 + 1.26 + 0.28 + 4.2 + 4.2 + 1.0 + 1.0 = 14.04$	0.55
Firehouse/ G06H00189330	2006	$1.01 + 0.81 + 0.14025 + 0.14025 + 1.26 + 0.28 + 4.2 + 4.2 + 1.0 + 1.0 + 0.5 = 14.54$	0.54
Range Control/ A20P02815	2009	$1.01 + 0.81 + 0.14025 + 0.14025 + 1.26 + 0.28 + 4.2 + 4.2 + 1.0 + 1.0 + 0.5 + 0.3 = 14.84$	0.54

SECTION E.1

OPERATION CONDITIONS

Facility Description [326 IAC 2-5.1-2(f)(2)] [326 IAC 2-5.5-4(a)(2)]:

(j) Emergency generators, including:

- (1) Building 610 jet fuel-fired emergency generator, identified as GEN01, manufactured in 1974, installed in 2004, with a maximum heat input capacity of 80.4 HP.
- (2) Building 40174 jet fuel-fired emergency generator, identified as GEN02, manufactured in 1983, installed in 2009, with a maximum heat input capacity of 80.4 HP.
- (3) Building 2 jet fuel-fired emergency generator, identified as GEN03, manufactured in 1999, installed in 2010, with a maximum heat input capacity of 107.3 HP.
- (4) Building 1 jet fuel-fired emergency generator, identified as GEN04, manufactured in 1999, installed in 2010, with a maximum heat input capacity of 107.3 HP.
- (5) Building 225 jet fuel-fired emergency generator, identified as GEN05, manufactured in 1999, installed in 2010, with a maximum heat input capacity of 107.3 HP.
- (6) Building 26411 propane-fired emergency generator, identified as GEN06, manufactured in 2011, installed in 2011, with a maximum heat input capacity of 40.2 HP.

GEN06 is considered an affected facility under New Source Performance Standards for Stationary Spark Ignition Internal Combustion Engines (40 CFR 60, Subpart JJJJ)
- (7) Building 7 jet fuel-fired emergency generator, identified as GEN07, manufactured after April 1, 2006, installed in 2011, with a maximum heat input capacity of 134.1 HP.
- (8) Building 433 natural gas-fired emergency generator, identified as GEN08, manufactured in February 2007, installed in 2011, with a maximum heat input capacity of 9.4 HP.
- (9) Building 343 natural gas-fired emergency generator, identified as GEN09, manufactured in March 2008, installed in 2011, with a maximum heat input capacity of 9.4 HP.
- (10) Building 7 jet fuel-fired emergency generator, identified as GEN10, manufactured in June 2002, installed in 2011, with a maximum heat input capacity of 67.1 HP.
- (11) Building 40180 natural gas-fired emergency generator, identified as GEN11, manufactured in October 2005, installed in 2011, with a maximum heat input capacity of 80.4 HP.
- (12) Building 3 jet fuel-fired emergency generator, identified as GEN12, manufactured after April 1, 2006, installed in 2011, with a maximum heat input capacity of 134.1 HP.
- (13) Building 127 jet fuel-fired emergency generator, identified as GEN13, manufactured after April 1, 2006, installed in 2011, with a maximum heat input capacity of 134.1 HP.
- (14) Building 40174 jet fuel-fired emergency generator, identified as GEN14, manufactured in June 2010, installed in 2010, with a maximum heat input capacity of 67.1 HP.
- (15) East Water Tower Building jet fuel-fired emergency generator, identified as GEN15, manufactured prior to 2005, installed in 2005, with a maximum heat input capacity of 26.8 HP.
- (16) Building 40134 jet fuel-fired emergency generator, identified as GEN16, manufactured after April 1, 2006, installed in 2011, with a maximum heat input capacity of 80.4 HP.

- (17) Building 40203 jet fuel-fired emergency generator, identified as GEN17, manufactured after April 1, 2006, installed in 2009, with a maximum heat input capacity of 80.4 HP.

GEN07, GEN12, GEN13, GEN14, GEN16 and GEN17 are considered affected facilities under New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines (40 CFR 60, Subpart IIII).

GEN02 through GEN05, GEN07, GEN06, GEN08, GEN09, GEN10, GEN11, GEN12 through GEN14, GEN16 and GEN17 are considered new affected facilities under the 40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants (NESHAP).

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

E.1.1 General Provisions Relating to New Source Performance Standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines [40 CFR Part 60, Subpart A] [326 IAC 12-1]

Pursuant to 40 CFR 60.4200, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1, as specified in Table 8 of 40 CFR Part 60, Subpart IIII in accordance with schedule in 40 CFR 60 Subpart IIII for the six (6) jet fueled (JP8)-fired emergency generators, identified as GEN07, GEN12, GEN13, GEN14, GEN16, and GEN17.

E.1.2 New Source Performance Standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines [40 CFR Part 60, Subpart IIII] [326 IAC 12]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart IIII (included as Attachment A of this permit), which are incorporated by reference as 326 IAC 12, for the six (6) jet fueled (JP8)-fired emergency generators, identified as GEN07, GEN12, GEN13, GEN14, GEN16, and GEN17:

- (1) 40 CFR 60.4200(a)(2)(i), (a)(4), (c)
- (2) 40 CFR 60.4205(b)
- (3) 40 CFR 60.4206
- (4) 40 CFR 60.4207
- (5) 40 CFR 60.4208
- (6) 40 CFR 60.4209
- (7) 40 CFR 60.4211(a), (c), (f), and (g)
- (8) 40 CFR 60.4212
- (9) 40 CFR 60.4214(b) and (c)
- (10) 40 CFR 60.4218
- (11) 40 CFR 60.4219
- (12) Table 8

E.1.3 General Provisions Relating to New Source Performance Standards (NSPS) for Stationary Spark Ignition Internal Combustion [40 CFR Part 60, Subpart A] [326 IAC 12-1]

Pursuant to 40 CFR 60.4230, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1, as specified in Table 3 of 40 CFR Part 60, Subpart JJJJ in accordance with schedule in 40 CFR 60 Subpart JJJJ, for the propane-fired emergency generator identified as GEN06.

E.1.4 New Source Performance Standards (NSPS) for Stationary Spark Ignition Internal Combustion [40 CFR Part 60, Subpart JJJJ] [326 IAC 12]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart JJJJ (included as Attachment B of this permit), which are incorporated by reference as 326 IAC 12, for the propane-fired emergency generator identified as GEN06.

- (1) 40 CFR 60.4230(a)(4)(iv), (a)(6), and (c)
- (2) 40 CFR 60.4233(c)
- (3) 40 CFR 60.4234
- (4) 40 CFR 60.4235
- (5) 40 CFR 60.4236
- (6) 40 CFR 60.4237(c)
- (7) 40 CFR 60.4243(a), (d), and (f)
- (8) 40 CFR 60.4244
- (9) 40 CFR 60.4245(a), (b), and (d)
- (10) 40 CFR 60.4246
- (11) 40 CFR 60.4248
- (12) Table 2
- (13) Table 3

E.1.5 National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines NESHAP [40 CFR Part 63, Subpart ZZZZ] [326 IAC 20-82]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ (included as Attachment C of this permit), which are incorporated by reference as 326 IAC 20-82, except as otherwise specified in 40 CFR Part 63, Subpart ZZZZ, for each of the emergency generators:

- (a) The eleven (11) jet fueled (JP8)-fired emergency generators (GEN02 through GEN05, GEN07, GEN10, GEN12 through GEN14, GEN16 and GEN17) the one (1) propane-fired emergency generator (GEN06) and the three (3) natural gas-fired emergency generators (GEN08, GEN09, and GEN11) are subject to the following applicable portions of the NESHAP for new stationary RICE at an area source of HAP:

- (1) 40 CFR 63.6580
- (2) 40 CFR 63.6585
- (3) 40 CFR 63.6590(a)(2)(iii) and (c)(1)
- (4) 40 CFR 63.6595(a)(6) and (a)(7)
- (5) 40 CFR 63.6665
- (6) 40 CFR 63.6670
- (7) 40 CFR 63.6675

Note: The two (2) jet fueled (JP8)-fired emergency generators (GEN01 and GEN15) are not subject to NESHAP ZZZZ, since these two emergency generators are considered existing institutional emergency stationary RICE and are exempt from 40 CFR Part 63, Subpart ZZZZ as defined in §63.6585(f)(3), which was amended on January 30, 2013 and is effective April 1, 2013.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH**

**MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	Camp Atterbury Joint Maneuver Training Center
Address:	3008 Hospital Road
City:	Edinburgh, Indiana 46124
Phone #:	(812) 526-1255
MSOP #:	M081-31782-00042

I hereby certify that Camp Atterbury Joint Maneuver Training Center is : ☐ still in operation.

I hereby certify that Camp Atterbury Joint Maneuver Training Center is : ☐ no longer in operation.
☐ in compliance with the requirements of MSOP M081-31782-00042.
☐ not in compliance with the requirements of MSOP M081-31782-00042.

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

MALFUNCTION REPORT

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
FAX NUMBER: (317) 233-6865**

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6
and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ? _____, 25 TONS/YEAR SULFUR DIOXIDE ? _____, 25 TONS/YEAR NITROGEN OXIDES? _____, 25 TONS/YEAR VOC ? _____, 25 TONS/YEAR HYDROGEN SULFIDE ? _____, 25 TONS/YEAR TOTAL REDUCED SULFUR ? _____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ? _____, 25 TONS/YEAR FLUORIDES ? _____, 100 TONS/YEAR CARBON MONOXIDE ? _____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ? _____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ? _____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ? _____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ? _____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF "MALFUNCTION" AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY: _____ PHONE NO. () _____
LOCATION: (CITY AND COUNTY) _____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP: _____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: _____

DATE/TIME MALFUNCTION STARTED: ____/____/20____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE ____/____/20____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO₂, VOC, OTHER: _____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: _____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____
INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

MALFUNCTION REPORTED BY: _____ TITLE: _____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

*SEE PAGE 2

**Please note - This form should only be used to report malfunctions
applicable to Rule 326 IAC 1-6 and to qualify for
the exemption under 326 IAC 1-6-4.**

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

**Indiana Department of Environmental Management
Office of Air Quality**

Attachment A

Title 40: Protection of Environment

PART 60—Standards of Performance for New Stationary Sources

Subpart III—Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Source: 71 FR 39172, July 11, 2006, unless otherwise noted.

What This Subpart Covers

§ 60.4200 Am I subject to this subpart?

(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) and other persons as specified in paragraphs (a)(1) through (4) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

(1) Manufacturers of stationary CI ICE with a displacement of less than 30 liters per cylinder where the model year is:

(i) 2007 or later, for engines that are not fire pump engines;

(ii) The model year listed in Table 3 to this subpart or later model year, for fire pump engines.

(2) Owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are:

(i) Manufactured after April 1, 2006, and are not fire pump engines, or

(ii) Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.

(3) Owners and operators of any stationary CI ICE that are modified or reconstructed after July 11, 2005 and any person that modifies or reconstructs any stationary CI ICE after July 11, 2005.

(4) The provisions of § 60.4208 of this subpart are applicable to all owners and operators of stationary CI ICE that commence construction after July 11, 2005.

(b) The provisions of this subpart are not applicable to stationary CI ICE being tested at a stationary CI ICE test cell/stand.

(c) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart applicable to area sources.

(d) Stationary CI ICE may be eligible for exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C (or the exemptions described in 40 CFR part 89, subpart J and 40 CFR part 94, subpart J, for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security.

(e) Owners and operators of facilities with CI ICE that are acting as temporary replacement units and that are located at a stationary source for less than 1 year and that have been properly certified as meeting the standards that would be applicable to such engine under the appropriate nonroad engine provisions, are not required to meet any other provisions under this subpart with regard to such engines.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37967, June 28, 2011]

Emission Standards for Manufacturers

§ 60.4201 What emission standards must I meet for non-emergency engines if I am a stationary CI internal combustion engine manufacturer?

(a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later non-emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 kilowatt (KW) (3,000 horsepower (HP)) and a displacement of less than 10 liters per cylinder to the certification emission standards for new nonroad CI engines in 40 CFR 89.112, 40 CFR 89.113, 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable, for all pollutants, for the same model year and maximum engine power.

(b) Stationary CI internal combustion engine manufacturers must certify their 2007 through 2010 model year non-emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder to the emission standards in table 1 to this subpart, for all pollutants, for the same maximum engine power.

(c) Stationary CI internal combustion engine manufacturers must certify their 2011 model year and later non-emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder to the certification emission standards for new nonroad CI engines in 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable, for all pollutants, for the same maximum engine power.

(d) Stationary CI internal combustion engine manufacturers must certify the following non-emergency stationary CI ICE to the certification emission standards for new marine CI engines in 40 CFR 94.8, as applicable, for all pollutants, for the same displacement and maximum engine power:

(1) Their 2007 model year through 2012 non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder;

(2) Their 2013 model year non-emergency stationary CI ICE with a maximum engine power greater than or equal to 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder; and

(3) Their 2013 model year non-emergency stationary CI ICE with a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder.

(e) Stationary CI internal combustion engine manufacturers must certify the following non-emergency stationary CI ICE to the certification emission standards and other requirements for new marine CI engines in 40 CFR 1042.101, 40 CFR 1042.107, 40 CFR 1042.110, 40 CFR 1042.115, 40 CFR

1042.120, and 40 CFR 1042.145, as applicable, for all pollutants, for the same displacement and maximum engine power:

(1) Their 2013 model year non-emergency stationary CI ICE with a maximum engine power less than 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder; and

(2) Their 2014 model year and later non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder.

(f) Notwithstanding the requirements in paragraphs (a) through (c) of this section, stationary non-emergency CI ICE identified in paragraphs (a) and (c) may be certified to the provisions of 40 CFR part 94 or, if Table 1 to 40 CFR 1042.1 identifies 40 CFR part 1042 as being applicable, 40 CFR part 1042, if the engines will be used solely in either or both of the following locations:

(1) Areas of Alaska not accessible by the Federal Aid Highway System (FAHS); and

(2) Marine offshore installations.

(g) Notwithstanding the requirements in paragraphs (a) through (f) of this section, stationary CI internal combustion engine manufacturers are not required to certify reconstructed engines; however manufacturers may elect to do so. The reconstructed engine must be certified to the emission standards specified in paragraphs (a) through (e) of this section that are applicable to the model year, maximum engine power, and displacement of the reconstructed stationary CI ICE.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37967, June 28, 2011]

§ 60.4202 What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine manufacturer?

(a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (a)(1) through (2) of this section.

(1) For engines with a maximum engine power less than 37 KW (50 HP):

(i) The certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants for model year 2007 engines, and

(ii) The certification emission standards for new nonroad CI engines in 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, 40 CFR 1039.115, and table 2 to this subpart, for 2008 model year and later engines.

(2) For engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007.

(b) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a

displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (b)(1) through (2) of this section.

(1) For 2007 through 2010 model years, the emission standards in table 1 to this subpart, for all pollutants, for the same maximum engine power.

(2) For 2011 model year and later, the certification emission standards for new nonroad CI engines for engines of the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants.

(c) [Reserved]

(d) Beginning with the model years in table 3 to this subpart, stationary CI internal combustion engine manufacturers must certify their fire pump stationary CI ICE to the emission standards in table 4 to this subpart, for all pollutants, for the same model year and NFPA nameplate power.

(e) Stationary CI internal combustion engine manufacturers must certify the following emergency stationary CI ICE that are not fire pump engines to the certification emission standards for new marine CI engines in 40 CFR 94.8, as applicable, for all pollutants, for the same displacement and maximum engine power:

(1) Their 2007 model year through 2012 emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder;

(2) Their 2013 model year and later emergency stationary CI ICE with a maximum engine power greater than or equal to 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder;

(3) Their 2013 model year emergency stationary CI ICE with a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder; and

(4) Their 2014 model year and later emergency stationary CI ICE with a maximum engine power greater than or equal to 2,000 KW (2,682 HP) and a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder.

(f) Stationary CI internal combustion engine manufacturers must certify the following emergency stationary CI ICE to the certification emission standards and other requirements applicable to Tier 3 new marine CI engines in 40 CFR 1042.101, 40 CFR 1042.107, 40 CFR 1042.115, 40 CFR 1042.120, and 40 CFR 1042.145, for all pollutants, for the same displacement and maximum engine power:

(1) Their 2013 model year and later emergency stationary CI ICE with a maximum engine power less than 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder; and

(2) Their 2014 model year and later emergency stationary CI ICE with a maximum engine power less than 2,000 KW (2,682 HP) and a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder.

(g) Notwithstanding the requirements in paragraphs (a) through (d) of this section, stationary emergency CI internal combustion engines identified in paragraphs (a) and (c) may be certified to the provisions of 40 CFR part 94 or, if Table 2 to 40 CFR 1042.101 identifies Tier 3 standards as being applicable, the requirements applicable to Tier 3 engines in 40 CFR part 1042, if the engines will be used solely in either or both of the following locations:

- (1) Areas of Alaska not accessible by the FAHS; and
- (2) Marine offshore installations.

(h) Notwithstanding the requirements in paragraphs (a) through (f) of this section, stationary CI internal combustion engine manufacturers are not required to certify reconstructed engines; however manufacturers may elect to do so. The reconstructed engine must be certified to the emission standards specified in paragraphs (a) through (f) of this section that are applicable to the model year, maximum engine power and displacement of the reconstructed emergency stationary CI ICE.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37968, June 28, 2011]

§ 60.4203 How long must my engines meet the emission standards if I am a manufacturer of stationary CI internal combustion engines?

Engines manufactured by stationary CI internal combustion engine manufacturers must meet the emission standards as required in §§ 60.4201 and 60.4202 during the certified emissions life of the engines.

[76 FR 37968, June 28, 2011]

Emission Standards for Owners and Operators

§ 60.4204 What emission standards must I meet for non-emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

(a) Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of less than 10 liters per cylinder must comply with the emission standards in table 1 to this subpart. Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder must comply with the emission standards in 40 CFR 94.8(a)(1).

(b) Owners and operators of 2007 model year and later non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder must comply with the emission standards for new CI engines in § 60.4201 for their 2007 model year and later stationary CI ICE, as applicable.

(c) Owners and operators of non-emergency stationary CI engines with a displacement of greater than or equal to 30 liters per cylinder must meet the following requirements:

(1) For engines installed prior to January 1, 2012, limit the emissions of NO_x in the stationary CI internal combustion engine exhaust to the following:

(i) 17.0 grams per kilowatt-hour (g/KW-hr) (12.7 grams per horsepower-hr (g/HP-hr)) when maximum engine speed is less than 130 revolutions per minute (rpm);

(ii) $45 \cdot n^{-0.2}$ g/KW-hr ($34 \cdot n^{-0.2}$ g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and

(iii) 9.8 g/KW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.

(2) For engines installed on or after January 1, 2012 and before January 1, 2016, limit the emissions of NO_x in the stationary CI internal combustion engine exhaust to the following:

- (i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;
- (ii) $44 \cdot n^{-0.23}$ g/KW-hr ($33 \cdot n^{-0.23}$ g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and
- (iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.

(3) For engines installed on or after January 1, 2016, limit the emissions of NO_x in the stationary CI internal combustion engine exhaust to the following:

- (i) 3.4 g/KW-hr (2.5 g/HP-hr) when maximum engine speed is less than 130 rpm;
- (ii) $9.0 \cdot n^{-0.20}$ g/KW-hr ($6.7 \cdot n^{-0.20}$ g/HP-hr) where n (maximum engine speed) is 130 or more but less than 2,000 rpm; and
- (iii) 2.0 g/KW-hr (1.5 g/HP-hr) where maximum engine speed is greater than or equal to 2,000 rpm.

(4) Reduce particulate matter (PM) emissions by 60 percent or more, or limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.15 g/KW-hr (0.11 g/HP-hr).

(d) Owners and operators of non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests in-use must meet the not-to-exceed (NTE) standards as indicated in § 60.4212.

(e) Owners and operators of any modified or reconstructed non-emergency stationary CI ICE subject to this subpart must meet the emission standards applicable to the model year, maximum engine power, and displacement of the modified or reconstructed non-emergency stationary CI ICE that are specified in paragraphs (a) through (d) of this section.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37968, June 28, 2011]

§ 60.4205 *What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?*

(a) Owners and operators of pre-2007 model year emergency stationary CI ICE with a displacement of less than 10 liters per cylinder that are not fire pump engines must comply with the emission standards in Table 1 to this subpart. Owners and operators of pre-2007 model year emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards in 40 CFR 94.8(a)(1).

(b) Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in § 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.

(c) Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in table 4 to this subpart, for all pollutants.

(d) Owners and operators of emergency stationary CI engines with a displacement of greater than or equal to 30 liters per cylinder must meet the requirements in this section.

(1) For engines installed prior to January 1, 2012, limit the emissions of NO_x in the stationary CI internal combustion engine exhaust to the following:

(i) 17.0 g/KW-hr (12.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $45 \cdot n^{-0.2}$ g/KW-hr ($34 \cdot n^{-0.2}$ g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and

(iii) 9.8 g/kW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.

(2) For engines installed on or after January 1, 2012, limit the emissions of NO_x in the stationary CI internal combustion engine exhaust to the following:

(i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $44 \cdot n^{-0.23}$ g/KW-hr ($33 \cdot n^{-0.23}$ g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and

(iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.

(3) Limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.40 g/KW-hr (0.30 g/HP-hr).

(e) Owners and operators of emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests in-use must meet the NTE standards as indicated in § 60.4212.

(f) Owners and operators of any modified or reconstructed emergency stationary CI ICE subject to this subpart must meet the emission standards applicable to the model year, maximum engine power, and displacement of the modified or reconstructed CI ICE that are specified in paragraphs (a) through (e) of this section.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

§ 60.4206 How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?

Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in §§ 60.4204 and 60.4205 over the entire life of the engine.

[76 FR 37969, June 28, 2011]

Fuel Requirements for Owners and Operators

§ 60.4207 What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?

[Link to an amendment published at 78 FR 6695, Jan. 30, 2013.](#)

(a) Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).

(b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must purchase diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.

(c) [Reserved]

(d) Beginning June 1, 2012, owners and operators of stationary CI ICE subject to this subpart with a displacement of greater than or equal to 30 liters per cylinder are no longer subject to the requirements of paragraph (a) of this section, and must use fuel that meets a maximum per-gallon sulfur content of 1,000 parts per million (ppm).

(e) Stationary CI ICE that have a national security exemption under § 60.4200(d) are also exempt from the fuel requirements in this section.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

Other Requirements for Owners and Operators

§ 60.4208 What is the deadline for importing or installing stationary CI ICE produced in previous model years?

(a) After December 31, 2008, owners and operators may not install stationary CI ICE (excluding fire pump engines) that do not meet the applicable requirements for 2007 model year engines.

(b) After December 31, 2009, owners and operators may not install stationary CI ICE with a maximum engine power of less than 19 KW (25 HP) (excluding fire pump engines) that do not meet the applicable requirements for 2008 model year engines.

(c) After December 31, 2014, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 19 KW (25 HP) and less than 56 KW (75 HP) that do not meet the applicable requirements for 2013 model year non-emergency engines.

(d) After December 31, 2013, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 56 KW (75 HP) and less than 130 KW (175 HP) that do not meet the applicable requirements for 2012 model year non-emergency engines.

(e) After December 31, 2012, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 130 KW (175 HP), including those above 560 KW (750 HP), that do not meet the applicable requirements for 2011 model year non-emergency engines.

(f) After December 31, 2016, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 560 KW (750 HP) that do not meet the applicable requirements for 2015 model year non-emergency engines.

(g) After December 31, 2018, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power greater than or equal to 600 KW (804 HP) and less than 2,000 KW (2,680 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that do not meet the applicable requirements for 2017 model year non-emergency engines.

(h) In addition to the requirements specified in §§ 60.4201, 60.4202, 60.4204, and 60.4205, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements specified in paragraphs (a) through (g) of this section after the dates specified in paragraphs (a) through (g) of this section.

(i) The requirements of this section do not apply to owners or operators of stationary CI ICE that have been modified, reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

§ 60.4209 What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?

If you are an owner or operator, you must meet the monitoring requirements of this section. In addition, you must also meet the monitoring requirements specified in § 60.4211.

(a) If you are an owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine.

(b) If you are an owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in § 60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

Compliance Requirements

§ 60.4210 What are my compliance requirements if I am a stationary CI internal combustion engine manufacturer?

(a) Stationary CI internal combustion engine manufacturers must certify their stationary CI ICE with a displacement of less than 10 liters per cylinder to the emission standards specified in § 60.4201(a) through (c) and § 60.4202(a), (b) and (d) using the certification procedures required in 40 CFR part 89, subpart B, or 40 CFR part 1039, subpart C, as applicable, and must test their engines as specified in those parts. For the purposes of this subpart, engines certified to the standards in table 1 to this subpart shall be subject to the same requirements as engines certified to the standards in 40 CFR part 89. For the purposes of this subpart, engines certified to the standards in table 4 to this subpart shall be subject to the same requirements as engines certified to the standards in 40 CFR part 89, except that engines with NFPA nameplate power of less than 37 KW (50 HP) certified to model year 2011 or later standards shall be subject to the same requirements as engines certified to the standards in 40 CFR part 1039.

(b) Stationary CI internal combustion engine manufacturers must certify their stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder to the emission standards specified in § 60.4201(d) and (e) and § 60.4202(e) and (f) using the certification procedures required in 40 CFR part 94, subpart C, or 40 CFR part 1042, subpart C, as applicable, and must test their engines as specified in 40 CFR part 94 or 1042, as applicable.

(c) Stationary CI internal combustion engine manufacturers must meet the requirements of 40 CFR 1039.120, 1039.125, 1039.130, and 1039.135, and 40 CFR part 1068 for engines that are certified to the

emission standards in 40 CFR part 1039. Stationary CI internal combustion engine manufacturers must meet the corresponding provisions of 40 CFR part 89, 40 CFR part 94 or 40 CFR part 1042 for engines that would be covered by that part if they were nonroad (including marine) engines. Labels on such engines must refer to stationary engines, rather than or in addition to nonroad or marine engines, as appropriate. Stationary CI internal combustion engine manufacturers must label their engines according to paragraphs (c)(1) through (3) of this section.

(1) Stationary CI internal combustion engines manufactured from January 1, 2006 to March 31, 2006 (January 1, 2006 to June 30, 2006 for fire pump engines), other than those that are part of certified engine families under the nonroad CI engine regulations, must be labeled according to 40 CFR 1039.20.

(2) Stationary CI internal combustion engines manufactured from April 1, 2006 to December 31, 2006 (or, for fire pump engines, July 1, 2006 to December 31 of the year preceding the year listed in table 3 to this subpart) must be labeled according to paragraphs (c)(2)(i) through (iii) of this section:

(i) Stationary CI internal combustion engines that are part of certified engine families under the nonroad regulations must meet the labeling requirements for nonroad CI engines, but do not have to meet the labeling requirements in 40 CFR 1039.20.

(ii) Stationary CI internal combustion engines that meet Tier 1 requirements (or requirements for fire pumps) under this subpart, but do not meet the requirements applicable to nonroad CI engines must be labeled according to 40 CFR 1039.20. The engine manufacturer may add language to the label clarifying that the engine meets Tier 1 requirements (or requirements for fire pumps) of this subpart.

(iii) Stationary CI internal combustion engines manufactured after April 1, 2006 that do not meet Tier 1 requirements of this subpart, or fire pumps engines manufactured after July 1, 2006 that do not meet the requirements for fire pumps under this subpart, may not be used in the U.S. If any such engines are manufactured in the U.S. after April 1, 2006 (July 1, 2006 for fire pump engines), they must be exported or must be brought into compliance with the appropriate standards prior to initial operation. The export provisions of 40 CFR 1068.230 would apply to engines for export and the manufacturers must label such engines according to 40 CFR 1068.230.

(3) Stationary CI internal combustion engines manufactured after January 1, 2007 (for fire pump engines, after January 1 of the year listed in table 3 to this subpart, as applicable) must be labeled according to paragraphs (c)(3)(i) through (iii) of this section.

(i) Stationary CI internal combustion engines that meet the requirements of this subpart and the corresponding requirements for nonroad (including marine) engines of the same model year and HP must be labeled according to the provisions in 40 CFR parts 89, 94, 1039 or 1042, as appropriate.

(ii) Stationary CI internal combustion engines that meet the requirements of this subpart, but are not certified to the standards applicable to nonroad (including marine) engines of the same model year and HP must be labeled according to the provisions in 40 CFR parts 89, 94, 1039 or 1042, as appropriate, but the words "stationary" must be included instead of "nonroad" or "marine" on the label. In addition, such engines must be labeled according to 40 CFR 1039.20.

(iii) Stationary CI internal combustion engines that do not meet the requirements of this subpart must be labeled according to 40 CFR 1068.230 and must be exported under the provisions of 40 CFR 1068.230.

(d) An engine manufacturer certifying an engine family or families to standards under this subpart that are identical to standards applicable under 40 CFR parts 89, 94, 1039 or 1042 for that model year may certify any such family that contains both nonroad (including marine) and stationary engines as a single engine

family and/or may include any such family containing stationary engines in the averaging, banking and trading provisions applicable for such engines under those parts.

(e) Manufacturers of engine families discussed in paragraph (d) of this section may meet the labeling requirements referred to in paragraph (c) of this section for stationary CI ICE by either adding a separate label containing the information required in paragraph (c) of this section or by adding the words “and stationary” after the word “nonroad” or “marine,” as appropriate, to the label.

(f) Starting with the model years shown in table 5 to this subpart, stationary CI internal combustion engine manufacturers must add a permanent label stating that the engine is for stationary emergency use only to each new emergency stationary CI internal combustion engine greater than or equal to 19 KW (25 HP) that meets all the emission standards for emergency engines in § 60.4202 but does not meet all the emission standards for non-emergency engines in § 60.4201. The label must be added according to the labeling requirements specified in 40 CFR 1039.135(b). Engine manufacturers must specify in the owner's manual that operation of emergency engines is limited to emergency operations and required maintenance and testing.

(g) Manufacturers of fire pump engines may use the test cycle in table 6 to this subpart for testing fire pump engines and may test at the NFPA certified nameplate HP, provided that the engine is labeled as “Fire Pump Applications Only”.

(h) Engine manufacturers, including importers, may introduce into commerce uncertified engines or engines certified to earlier standards that were manufactured before the new or changed standards took effect until inventories are depleted, as long as such engines are part of normal inventory. For example, if the engine manufacturers' normal industry practice is to keep on hand a one-month supply of engines based on its projected sales, and a new tier of standards starts to apply for the 2009 model year, the engine manufacturer may manufacture engines based on the normal inventory requirements late in the 2008 model year, and sell those engines for installation. The engine manufacturer may not circumvent the provisions of §§ 60.4201 or 60.4202 by stockpiling engines that are built before new or changed standards take effect. Stockpiling of such engines beyond normal industry practice is a violation of this subpart.

(i) The replacement engine provisions of 40 CFR 89.1003(b)(7), 40 CFR 94.1103(b)(3), 40 CFR 94.1103(b)(4) and 40 CFR 1068.240 are applicable to stationary CI engines replacing existing equipment that is less than 15 years old.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

§ 60.4211 What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

[Link to an amendment published at 78 FR 6695, Jan. 30, 2013.](#)

(a) If you are an owner or operator and must comply with the emission standards specified in this subpart, you must do all of the following, except as permitted under paragraph (g) of this section:

(1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;

(2) Change only those emission-related settings that are permitted by the manufacturer; and

(3) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.

(b) If you are an owner or operator of a pre-2007 model year stationary CI internal combustion engine and must comply with the emission standards specified in §§ 60.4204(a) or 60.4205(a), or if you are an owner or operator of a CI fire pump engine that is manufactured prior to the model years in table 3 to this subpart and must comply with the emission standards specified in § 60.4205(c), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) through (5) of this section.

(1) Purchasing an engine certified according to 40 CFR part 89 or 40 CFR part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.

(2) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.

(3) Keeping records of engine manufacturer data indicating compliance with the standards.

(4) Keeping records of control device vendor data indicating compliance with the standards.

(5) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in § 60.4212, as applicable.

(c) If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in § 60.4204(b) or § 60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in § 60.4205(c), you must comply by purchasing an engine certified to the emission standards in § 60.4204(b), or § 60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in paragraph (g) of this section.

(d) If you are an owner or operator and must comply with the emission standards specified in § 60.4204(c) or § 60.4205(d), you must demonstrate compliance according to the requirements specified in paragraphs (d)(1) through (3) of this section.

(1) Conducting an initial performance test to demonstrate initial compliance with the emission standards as specified in § 60.4213.

(2) Establishing operating parameters to be monitored continuously to ensure the stationary internal combustion engine continues to meet the emission standards. The owner or operator must petition the Administrator for approval of operating parameters to be monitored continuously. The petition must include the information described in paragraphs (d)(2)(i) through (v) of this section.

(i) Identification of the specific parameters you propose to monitor continuously;

(ii) A discussion of the relationship between these parameters and NO_x and PM emissions, identifying how the emissions of these pollutants change with changes in these parameters, and how limitations on these parameters will serve to limit NO_x and PM emissions;

(iii) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;

(iv) A discussion identifying the methods and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

(v) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

(3) For non-emergency engines with a displacement of greater than or equal to 30 liters per cylinder, conducting annual performance tests to demonstrate continuous compliance with the emission standards as specified in § 60.4213.

(e) If you are an owner or operator of a modified or reconstructed stationary CI internal combustion engine and must comply with the emission standards specified in § 60.4204(e) or § 60.4205(f), you must demonstrate compliance according to one of the methods specified in paragraphs (e)(1) or (2) of this section.

(1) Purchasing, or otherwise owning or operating, an engine certified to the emission standards in § 60.4204(e) or § 60.4205(f), as applicable.

(2) Conducting a performance test to demonstrate initial compliance with the emission standards according to the requirements specified in § 60.4212 or § 60.4213, as appropriate. The test must be conducted within 60 days after the engine commences operation after the modification or reconstruction.

(f) Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited.

(g) If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows:

(1) If you are an owner or operator of a stationary CI internal combustion engine with maximum engine power less than 100 HP, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if you do not install and configure the engine and control device according to the manufacturer's emission-related written instructions, or you change the emission-related settings in a way that is not permitted by the manufacturer, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.

(2) If you are an owner or operator of a stationary CI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent

with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer.

(3) If you are an owner or operator of a stationary CI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. You must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37970, June 28, 2011]

Testing Requirements for Owners and Operators

§ 60.4212 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder?

Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to this subpart must do so according to paragraphs (a) through (e) of this section.

(a) The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F, for stationary CI ICE with a displacement of less than 10 liters per cylinder, and according to 40 CFR part 1042, subpart F, for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder.

(b) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1039 must not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR part 1039.

(c) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8, as applicable, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112 or 40 CFR 94.8, as applicable, determined from the following equation:

$$\text{NTE requirement for each pollutant} = (1.25) \times (\text{STD}) \quad (\text{Eq. 1})$$

Where:

STD = The standard specified for that pollutant in 40 CFR 89.112 or 40 CFR 94.8, as applicable.

Alternatively, stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8 may follow the testing procedures specified in § 60.4213 of this subpart, as appropriate.

(d) Exhaust emissions from stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in § 60.4204(a), § 60.4205(a), or § 60.4205(c) must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in § 60.4204(a), § 60.4205(a), or § 60.4205(c), determined from the equation in paragraph (c) of this section.

Where:

STD = The standard specified for that pollutant in § 60.4204(a), § 60.4205(a), or § 60.4205(c).

Alternatively, stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in § 60.4204(a), § 60.4205(a), or § 60.4205(c) may follow the testing procedures specified in § 60.4213, as appropriate.

(e) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1042 must not exceed the NTE standards for the same model year and maximum engine power as required in 40 CFR 1042.101(c).

[71 FR 39172, July 11, 2006, as amended at 76 FR 37971, June 28, 2011]

§ 60.4213 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of greater than or equal to 30 liters per cylinder?

Owners and operators of stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must conduct performance tests according to paragraphs (a) through (f) of this section.

(a) Each performance test must be conducted according to the requirements in § 60.8 and under the specific conditions that this subpart specifies in table 7. The test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load.

(b) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in § 60.8(c).

(c) You must conduct three separate test runs for each performance test required in this section, as specified in § 60.8(f). Each test run must last at least 1 hour.

(d) To determine compliance with the percent reduction requirement, you must follow the requirements as specified in paragraphs (d)(1) through (3) of this section.

(1) You must use Equation 2 of this section to determine compliance with the percent reduction requirement:

$$\frac{C_i - C_o}{C_i} \times 100 = R \quad (\text{Eq. 2})$$

Where:

C_i = concentration of NO_x or PM at the control device inlet,

C_o = concentration of NO_x or PM at the control device outlet, and

R = percent reduction of NO_x or PM emissions.

(2) You must normalize the NO_x or PM concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen (O_2) using Equation 3 of this section, or an equivalent percent carbon dioxide (CO_2) using the procedures described in paragraph (d)(3) of this section.

$$C_{adj} = C_d \frac{5.9}{20.9 - \% \text{O}_2} \quad (\text{Eq. 3})$$

Where:

C_{adj} = Calculated NO_x or PM concentration adjusted to 15 percent O_2 .

C_d = Measured concentration of NO_x or PM, uncorrected.

5.9 = 20.9 percent O_2 – 15 percent O_2 , the defined O_2 correction value, percent.

$\% \text{O}_2$ = Measured O_2 concentration, dry basis, percent.

(3) If pollutant concentrations are to be corrected to 15 percent O_2 and CO_2 concentration is measured in lieu of O_2 concentration measurement, a CO_2 correction factor is needed. Calculate the CO_2 correction factor as described in paragraphs (d)(3)(i) through (iii) of this section.

(i) Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

$$F_o = \frac{0.209 F_d}{F_c} \quad (\text{Eq. 4})$$

Where:

F_o = Fuel factor based on the ratio of O_2 volume to the ultimate CO_2 volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is O_2 , percent/100.

F_d = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm^3/J ($\text{dscf}/10^6 \text{ Btu}$).

F_c = Ratio of the volume of CO_2 produced to the gross calorific value of the fuel from Method 19, dsm^3/J ($\text{dscf}/10^6 \text{ Btu}$).

(ii) Calculate the CO_2 correction factor for correcting measurement data to 15 percent O_2 , as follows:

$$X_{\text{CO}_2} = \frac{5.9}{F_o} \quad (\text{Eq. 5})$$

Where:

X_{CO_2} = CO_2 correction factor, percent.

5.9 = 20.9 percent O₂ – 15 percent O₂ , the defined O₂ correction value, percent.

(iii) Calculate the NO_x and PM gas concentrations adjusted to 15 percent O₂ using CO₂ as follows:

$$C_{adj} = C_d \frac{X_{CO_2}}{\%CO_2} \quad (\text{Eq. 6})$$

Where:

C_{adj} = Calculated NO_x or PM concentration adjusted to 15 percent O₂ .

C_d = Measured concentration of NO_x or PM, uncorrected.

%CO₂ = Measured CO₂ concentration, dry basis, percent.

(e) To determine compliance with the NO_x mass per unit output emission limitation, convert the concentration of NO_x in the engine exhaust using Equation 7 of this section:

$$ER = \frac{C_d \times 1.912 \times 10^{-3} \times Q \times T}{KW\text{-hour}} \quad (\text{Eq. 7})$$

Where:

ER = Emission rate in grams per KW-hour.

C_d = Measured NO_x concentration in ppm.

1.912x10⁻³ = Conversion constant for ppm NO_x to grams per standard cubic meter at 25 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour.

T = Time of test run, in hours.

KW-hour = Brake work of the engine, in KW-hour.

(f) To determine compliance with the PM mass per unit output emission limitation, convert the concentration of PM in the engine exhaust using Equation 8 of this section:

$$ER = \frac{C_{adj} \times Q \times T}{KW\text{-hour}} \quad (\text{Eq. 8})$$

Where:

ER = Emission rate in grams per KW-hour.

C_{adj} = Calculated PM concentration in grams per standard cubic meter.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour.

T = Time of test run, in hours.

KW-hour = Energy output of the engine, in KW.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37971, June 28, 2011]

Notification, Reports, and Records for Owners and Operators

§ 60.4214 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?

[Link to an amendment published at 78 FR 6696, Jan. 30, 2013.](#)

(a) Owners and operators of non-emergency stationary CI ICE that are greater than 2,237 KW (3,000 HP), or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 130 KW (175 HP) and not certified, must meet the requirements of paragraphs (a)(1) and (2) of this section.

(1) Submit an initial notification as required in § 60.7(a)(1). The notification must include the information in paragraphs (a)(1)(i) through (v) of this section.

(i) Name and address of the owner or operator;

(ii) The address of the affected source;

(iii) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;

(iv) Emission control equipment; and

(v) Fuel used.

(2) Keep records of the information in paragraphs (a)(2)(i) through (iv) of this section.

(i) All notifications submitted to comply with this subpart and all documentation supporting any notification.

(ii) Maintenance conducted on the engine.

(iii) If the stationary CI internal combustion is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards.

(iv) If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the emission standards.

(b) If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

(c) If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.

Special Requirements

§ 60.4215 What requirements must I meet for engines used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands?

- (a) Stationary CI ICE with a displacement of less than 30 liters per cylinder that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are required to meet the applicable emission standards in §§ 60.4202 and 60.4205.
- (b) Stationary CI ICE that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are not required to meet the fuel requirements in § 60.4207.
- (c) Stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are required to meet the following emission standards:
- (1) For engines installed prior to January 1, 2012, limit the emissions of NO_x in the stationary CI internal combustion engine exhaust to the following:
- (i) 17.0 g/KW-hr (12.7 g/HP-hr) when maximum engine speed is less than 130 rpm;
 - (ii) $45 \cdot n^{-0.2}$ g/KW-hr ($34 \cdot n^{-0.2}$ g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and
 - (iii) 9.8 g/KW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.
- (2) For engines installed on or after January 1, 2012, limit the emissions of NO_x in the stationary CI internal combustion engine exhaust to the following:
- (i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;
 - (ii) $44 \cdot n^{-0.23}$ g/KW-hr ($33 \cdot n^{-0.23}$ g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and
 - (iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.
- (3) Limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.40 g/KW-hr (0.30 g/HP-hr).

[71 FR 39172, July 11, 2006, as amended at 76 FR 37971, June 28, 2011]

§ 60.4216 What requirements must I meet for engines used in Alaska?

- (a) Prior to December 1, 2010, owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder located in areas of Alaska not accessible by the FAHS should refer to 40 CFR part 69 to determine the diesel fuel requirements applicable to such engines.
- (b) Except as indicated in paragraph (c) of this section, manufacturers, owners and operators of stationary CI ICE with a displacement of less than 10 liters per cylinder located in areas of Alaska not accessible by the FAHS may meet the requirements of this subpart by manufacturing and installing engines meeting the requirements of 40 CFR parts 94 or 1042, as appropriate, rather than the otherwise

applicable requirements of 40 CFR parts 89 and 1039, as indicated in sections §§ 60.4201(f) and 60.4202(g) of this subpart.

(c) Manufacturers, owners and operators of stationary CI ICE that are located in areas of Alaska not accessible by the FAHS may choose to meet the applicable emission standards for emergency engines in § 60.4202 and § 60.4205, and not those for non-emergency engines in § 60.4201 and § 60.4204, except that for 2014 model year and later non-emergency CI ICE, the owner or operator of any such engine that was not certified as meeting Tier 4 PM standards, must meet the applicable requirements for PM in § 60.4201 and § 60.4204 or install a PM emission control device that achieves PM emission reductions of 85 percent, or 60 percent for engines with a displacement of greater than or equal to 30 liters per cylinder, compared to engine-out emissions.

(d) The provisions of § 60.4207 do not apply to owners and operators of pre-2014 model year stationary CI ICE subject to this subpart that are located in areas of Alaska not accessible by the FAHS.

(e) The provisions of § 60.4208(a) do not apply to owners and operators of stationary CI ICE subject to this subpart that are located in areas of Alaska not accessible by the FAHS until after December 31, 2009.

(f) The provisions of this section and § 60.4207 do not prevent owners and operators of stationary CI ICE subject to this subpart that are located in areas of Alaska not accessible by the FAHS from using fuels mixed with used lubricating oil, in volumes of up to 1.75 percent of the total fuel. The sulfur content of the used lubricating oil must be less than 200 parts per million. The used lubricating oil must meet the on-specification levels and properties for used oil in 40 CFR 279.11.

[76 FR 37971, June 28, 2011]

§ 60.4217 What emission standards must I meet if I am an owner or operator of a stationary internal combustion engine using special fuels?

Owners and operators of stationary CI ICE that do not use diesel fuel may petition the Administrator for approval of alternative emission standards, if they can demonstrate that they use a fuel that is not the fuel on which the manufacturer of the engine certified the engine and that the engine cannot meet the applicable standards required in § 60.4204 or § 60.4205 using such fuels and that use of such fuel is appropriate and reasonably necessary, considering cost, energy, technical feasibility, human health and environmental, and other factors, for the operation of the engine.

[76 FR 37972, June 28, 2011]

General Provisions

§ 60.4218 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§ 60.1 through 60.19 apply to you.

DEFINITIONS

§ 60.4219 What definitions apply to this subpart?

[Link to an amendment published at 78 FR 6696, Jan. 30, 2013.](#)

As used in this subpart, all terms not defined herein shall have the meaning given them in the CAA and in subpart A of this part.

Certified emissions life means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. The values for certified emissions life for stationary CI ICE with a displacement of less than 10 liters per cylinder are given in 40 CFR 1039.101(g). The values for certified emissions life for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder are given in 40 CFR 94.9(a).

Combustion turbine means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), and any ancillary components and sub-components comprising any simple cycle combustion turbine, any regenerative/recuperative cycle combustion turbine, the combustion turbine portion of any cogeneration cycle combustion system, or the combustion turbine portion of any combined cycle steam/electric generating system.

Compression ignition means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

Date of manufacture means one of the following things:

- (1) For freshly manufactured engines and modified engines, date of manufacture means the date the engine is originally produced.
- (2) For reconstructed engines, date of manufacture means the date the engine was originally produced, except as specified in paragraph (3) of this definition.
- (3) Reconstructed engines are assigned a new date of manufacture if the fixed capital cost of the new and refurbished components exceeds 75 percent of the fixed capital cost of a comparable entirely new facility. An engine that is produced from a previously used engine block does not retain the date of manufacture of the engine in which the engine block was previously used if the engine is produced using all new components except for the engine block. In these cases, the date of manufacture is the date of reconstruction or the date the new engine is produced.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is number 2 distillate oil.

Diesel particulate filter means an emission control technology that reduces PM emissions by trapping the particles in a flow filter substrate and periodically removes the collected particles by either physical action or by oxidizing (burning off) the particles in a process called regeneration.

Emergency stationary internal combustion engine means any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc. Stationary CI ICE used to supply power to an electric grid or that supply power as part of a financial arrangement with another entity are not considered to be emergency engines.

Engine manufacturer means the manufacturer of the engine. See the definition of "manufacturer" in this section.

Fire pump engine means an emergency stationary internal combustion engine certified to NFPA requirements that is used to provide power to pump water for fire suppression or protection.

Freshly manufactured engine means an engine that has not been placed into service. An engine becomes freshly manufactured when it is originally produced.

Installed means the engine is placed and secured at the location where it is intended to be operated.

Manufacturer has the meaning given in section 216(1) of the Act. In general, this term includes any person who manufactures a stationary engine for sale in the United States or otherwise introduces a new stationary engine into commerce in the United States. This includes importers who import stationary engines for sale or resale.

Maximum engine power means maximum engine power as defined in 40 CFR 1039.801.

Model year means the calendar year in which an engine is manufactured (see “date of manufacture”), except as follows:

(1) Model year means the annual new model production period of the engine manufacturer in which an engine is manufactured (see “date of manufacture”), if the annual new model production period is different than the calendar year and includes January 1 of the calendar year for which the model year is named. It may not begin before January 2 of the previous calendar year and it must end by December 31 of the named calendar year.

(2) For an engine that is converted to a stationary engine after being placed into service as a nonroad or other non-stationary engine, model year means the calendar year or new model production period in which the engine was manufactured (see “date of manufacture”).

Other internal combustion engine means any internal combustion engine, except combustion turbines, which is not a reciprocating internal combustion engine or rotary internal combustion engine.

Reciprocating internal combustion engine means any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work.

Rotary internal combustion engine means any internal combustion engine which uses rotary motion to convert heat energy into mechanical work.

Spark ignition means relating to a gasoline, natural gas, or liquefied petroleum gas fueled engine or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for CI and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

Stationary internal combustion engine means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary internal combustion engine is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle, aircraft, or a vehicle used solely for competition. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

Subpart means 40 CFR part 60, subpart IIII.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37972, June 28, 2011]

Table 1 to Subpart IIII of Part 60—Emission Standards for Stationary Pre-2007 Model Year Engines With a Displacement of <10 Liters per Cylinder and 2007-2010 Model Year Engines >2,237 KW (3,000 HP) and With a Displacement of <10 Liters per Cylinder

[As stated in §§ 60.4201(b), 60.4202(b), 60.4204(a), and 60.4205(a), you must comply with the following emission standards]

Maximum engine power	Emission standards for stationary pre-2007 model year engines with a displacement of <10 liters per cylinder and 2007-2010 model year engines >2,237 KW (3,000 HP) and with a displacement of <10 liters per cylinder in g/KW-hr (g/HP-hr)				
	NMHC + NO _x	HC	NO _x	CO	PM
KW<8 (HP<11)	10.5 (7.8)			8.0 (6.0)	1.0 (0.75)
8≤KW<19 (11≤HP<25)	9.5 (7.1)			6.6 (4.9)	0.80 (0.60)
19≤KW<37 (25≤HP<50)	9.5 (7.1)			5.5 (4.1)	0.80 (0.60)
37≤KW<56 (50≤HP<75)			9.2 (6.9)		
56≤KW<75 (75≤HP<100)			9.2 (6.9)		
75≤KW<130 (100≤HP<175)			9.2 (6.9)		
130≤KW<225 (175≤HP<300)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
225≤KW<450 (300≤HP<600)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
450≤KW≤560 (600≤HP≤750)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
KW>560 (HP>750)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)

Table 2 to Subpart IIII of Part 60—Emission Standards for 2008 Model Year and Later Emergency Stationary CI ICE <37 KW (50 HP) With a Displacement of <10 Liters per Cylinder

[As stated in § 60.4202(a)(1), you must comply with the following emission standards]

Engine power	Emission standards for 2008 model year and later emergency stationary CI ICE <37 KW (50 HP) with a displacement of <10 liters per cylinder in g/KW-hr (g/HP-hr)			
	Model year(s)	NO _x + NMHC	CO	PM

KW<8 (HP<11)	2008+	7.5 (5.6)	8.0 (6.0)	0.40 (0.30)
8≤KW<19 (11≤HP<25)	2008+	7.5 (5.6)	6.6 (4.9)	0.40 (0.30)
19≤KW<37 (25≤HP<50)	2008+	7.5 (5.6)	5.5 (4.1)	0.30 (0.22)

Table 3 to Subpart IIII of Part 60—Certification Requirements for Stationary Fire Pump Engines

As stated in § 60.4202(d), you must certify new stationary fire pump engines beginning with the following model years:

Engine power	Starting model year engine manufacturers must certify new stationary fire pump engines according to § 60.4202(d)¹
KW<75 (HP<100)	2011
75≤KW<130 (100≤HP<175)	2010
130≤KW≤560 (175≤HP≤750)	2009
KW>560 (HP>750)	2008

¹Manufacturers of fire pump stationary CI ICE with a maximum engine power greater than or equal to 37 kW (50 HP) and less than 450 KW (600 HP) and a rated speed of greater than 2,650 revolutions per minute (rpm) are not required to certify such engines until three model years following the model year indicated in this Table 3 for engines in the applicable engine power category.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37972, June 28, 2011]

Table 4 to Subpart IIII of Part 60—Emission Standards for Stationary Fire Pump Engines

[As stated in §§ 60.4202(d) and 60.4205(c), you must comply with the following emission standards for stationary fire pump engines]

Maximum engine power	Model year(s)	NMHC + NO_x	CO	PM
KW<8 (HP<11)	2010 and earlier	10.5 (7.8)	8.0 (6.0)	1.0 (0.75)
	2011+	7.5 (5.6)		0.40 (0.30)
8≤KW<19 (11≤HP<25)	2010 and earlier	9.5 (7.1)	6.6 (4.9)	0.80 (0.60)

	2011+	7.5 (5.6)		0.40 (0.30)
19≤KW<37 (25≤HP<50)	2010 and earlier	9.5 (7.1)	5.5 (4.1)	0.80 (0.60)
	2011+	7.5 (5.6)		0.30 (0.22)
37≤KW<56 (50≤HP<75)	2010 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2011+ ¹	4.7 (3.5)		0.40 (0.30)
56≤KW<75 (75≤HP<100)	2010 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2011+ ¹	4.7 (3.5)		0.40 (0.30)
75≤KW<130 (100≤HP<175)	2009 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2010+ ²	4.0 (3.0)		0.30 (0.22)
130≤KW<225 (175≤HP<300)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009+ ³	4.0 (3.0)		0.20 (0.15)
225≤KW<450 (300≤HP<600)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009+ ³	4.0 (3.0)		0.20 (0.15)
450≤KW≤560 (600≤HP≤750)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009+	4.0 (3.0)		0.20 (0.15)
KW>560 (HP>750)	2007 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2008+	6.4 (4.8)		0.20 (0.15)

¹ For model years 2011-2013, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 revolutions per minute (rpm) may comply with the emission limitations for 2010 model year engines.

² For model years 2010-2012, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2009 model year engines.

³ In model years 2009-2011, manufacturers of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2008 model year engines.

Table 5 to Subpart IIII of Part 60—Labeling and Recordkeeping Requirements for New Stationary Emergency Engines

[You must comply with the labeling requirements in § 60.4210(f) and the recordkeeping requirements in § 60.4214(b) for new emergency stationary CI ICE beginning in the following model years:]

Engine power	Starting model year
19≤KW<56 (25≤HP<75)	2013
56≤KW<130 (75≤HP<175)	2012
KW≥130 (HP≥175)	2011

Table 6 to Subpart IIII of Part 60—Optional 3-Mode Test Cycle for Stationary Fire Pump Engines

[As stated in § 60.4210(g), manufacturers of fire pump engines may use the following test cycle for testing fire pump engines:]

Mode No.	Engine speed ¹	Torque (percent) ²	Weighting factors
1	Rated	100	0.30
2	Rated	75	0.50
3	Rated	50	0.20

¹ Engine speed: ±2 percent of point.

² Torque: NFPA certified nameplate HP for 100 percent point. All points should be ±2 percent of engine percent load value.

Table 7 to Subpart IIII of Part 60—Requirements for Performance Tests for Stationary CI ICE With a Displacement of ≥30 Liters per Cylinder

[As stated in § 60.4213, you must comply with the following requirements for performance tests for stationary CI ICE with a displacement of ≥30 liters per cylinder:]

For each	Complying with the requirement to	You must	Using	According to the following requirements
1. Stationary CI internal combustion engine with a displacement of ≥30 liters per cylinder	a. Reduce NO _x emissions by 90 percent or more	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A	(a) Sampling sites must be located at the inlet and outlet of the control device.
		ii. Measure O ₂ at the inlet and outlet of the control device;	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A	(b) Measurements to determine O ₂ concentration must be made at the same time as the measurements for NO _x concentration.
		iii. If necessary, measure moisture content at the inlet and outlet of the control device; and,	(3) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by	(c) Measurements to determine moisture content must be made at the same time as the measurements for NO _x concentration.

			reference, see § 60.17)	
		iv. Measure NO _x at the inlet and outlet of the control device	(4) Method 7E of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see § 60.17)	(d) NO _x concentration must be at 15 percent O ₂ , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
	b. Limit the concentration of NO _x in the stationary CI internal combustion engine exhaust.	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O ₂ concentration of the stationary internal combustion engine exhaust at the sampling port location; and,	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A	(b) Measurements to determine O ₂ concentration must be made at the same time as the measurement for NO _x concentration.
		iii. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and,	(3) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see § 60.17)	(c) Measurements to determine moisture content must be made at the same time as the measurement for NO _x concentration.
		iv. Measure NO _x at the exhaust of the stationary internal combustion engine	(4) Method 7E of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see § 60.17)	(d) NO _x concentration must be at 15 percent O ₂ , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
	c. Reduce PM emissions by 60 percent or more	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A	(a) Sampling sites must be located at the inlet and outlet of the control device.
		ii. Measure O ₂ at the inlet and outlet of the control device;	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A	(b) Measurements to determine O ₂ concentration must be

				made at the same time as the measurements for PM concentration.
		iii. If necessary, measure moisture content at the inlet and outlet of the control device; and	(3) Method 4 of 40 CFR part 60, appendix A	(c) Measurements to determine and moisture content must be made at the same time as the measurements for PM concentration.
		iv. Measure PM at the inlet and outlet of the control device	(4) Method 5 of 40 CFR part 60, appendix A	(d) PM concentration must be at 15 percent O ₂ , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
	d. Limit the concentration of PM in the stationary CI internal combustion engine exhaust	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O ₂ concentration of the stationary internal combustion engine exhaust at the sampling port location; and	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A	(b) Measurements to determine O ₂ concentration must be made at the same time as the measurements for PM concentration.
		iii. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(3) Method 4 of 40 CFR part 60, appendix A	(c) Measurements to determine moisture content must be made at the same time as the measurements for PM concentration.
		iv. Measure PM at the exhaust of the stationary internal combustion engine	(4) Method 5 of 40 CFR part 60, appendix A	(d) PM concentration must be at 15 percent O ₂ , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

Table 8 to Subpart IIII of Part 60—Applicability of General Provisions to Subpart IIII

[As stated in § 60.4218, you must comply with the following applicable General Provisions:]

General Provisions citation	Subject of citation	Applies to subpart	Explanation
§ 60.1	General applicability of the General Provisions	Yes	
§ 60.2	Definitions	Yes	Additional terms defined in § 60.4219.
§ 60.3	Units and abbreviations	Yes	
§ 60.4	Address	Yes	
§ 60.5	Determination of construction or modification	Yes	
§ 60.6	Review of plans	Yes	
§ 60.7	Notification and Recordkeeping	Yes	Except that § 60.7 only applies as specified in § 60.4214(a).
§ 60.8	Performance tests	Yes	Except that § 60.8 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder and engines that are not certified.
§ 60.9	Availability of information	Yes	
§ 60.10	State Authority	Yes	
§ 60.11	Compliance with standards and maintenance requirements	No	Requirements are specified in subpart IIII.
§ 60.12	Circumvention	Yes	
§ 60.13	Monitoring requirements	Yes	Except that § 60.13 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder.
§ 60.14	Modification	Yes	
§ 60.15	Reconstruction	Yes	
§ 60.16	Priority list	Yes	
§ 60.17	Incorporations by reference	Yes	
§ 60.18	General control device requirements	No	
§ 60.19	General notification and reporting requirements	Yes	

**Indiana Department of Environmental Management
Office of Air Quality**

Attachment B

Title 40: Protection of Environment

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

Subpart JJJJ—Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

Source: 73 FR 3591, Jan. 18, 2008, unless otherwise noted.

What This Subpart Covers

§ 60.4230 Am I subject to this subpart?

(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (6) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

(1) Manufacturers of stationary SI ICE with a maximum engine power less than or equal to 19 kilowatt (KW) (25 horsepower (HP)) that are manufactured on or after July 1, 2008.

(2) Manufacturers of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that are gasoline fueled or that are rich burn engines fueled by liquefied petroleum gas (LPG), where the date of manufacture is:

(i) On or after July 1, 2008; or

(ii) On or after January 1, 2009, for emergency engines.

(3) Manufacturers of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that are not gasoline fueled and are not rich burn engines fueled by LPG, where the manufacturer participates in the voluntary manufacturer certification program described in this subpart and where the date of manufacture is:

(i) On or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP);

(ii) On or after January 1, 2008, for lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP;

(iii) On or after July 1, 2008, for engines with a maximum engine power less than 500 HP; or

(iv) On or after January 1, 2009, for emergency engines.

(4) Owners and operators of stationary SI ICE that commence construction after June 12, 2006, where the stationary SI ICE are manufactured:

- (i) On or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP);
 - (ii) on or after January 1, 2008, for lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP;
 - (iii) on or after July 1, 2008, for engines with a maximum engine power less than 500 HP; or
 - (iv) on or after January 1, 2009, for emergency engines with a maximum engine power greater than 19 KW (25 HP).
- (5) Owners and operators of stationary SI ICE that are modified or reconstructed after June 12, 2006, and any person that modifies or reconstructs any stationary SI ICE after June 12, 2006.
- (6) The provisions of § 60.4236 of this subpart are applicable to all owners and operators of stationary SI ICE that commence construction after June 12, 2006.
- (b) The provisions of this subpart are not applicable to stationary SI ICE being tested at an engine test cell/stand.
- (c) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable.
- (d) For the purposes of this subpart, stationary SI ICE using alcohol-based fuels are considered gasoline engines.
- (e) Stationary SI ICE may be eligible for exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C (or the exemptions described in 40 CFR parts 90 and 1048, for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security.
- (f) Owners and operators of facilities with internal combustion engines that are acting as temporary replacement units and that are located at a stationary source for less than 1 year and that have been properly certified as meeting the standards that would be applicable to such engine under the appropriate nonroad engine provisions, are not required to meet any other provisions under this subpart with regard to such engines.

[73 FR 3591, Jan. 18, 2008, as amended at 76 FR 37972, June 28, 2011]

Emission Standards for Manufacturers

§ 60.4231 What emission standards must I meet if I am a manufacturer of stationary SI internal combustion engines or equipment containing such engines?

[Link to an amendment published at 78 FR 6697, Jan. 30, 2013.](#)

(a) Stationary SI internal combustion engine manufacturers must certify their stationary SI ICE with a maximum engine power less than or equal to 19 KW (25 HP) manufactured on or after July 1, 2008 to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 90 or 1054, as follows:

If engine displacement is * * *	and manufacturing dates are * * *	the engine must meet emission standards and related requirements for nonhandheld engines under * * *
(1) below 225 cc	July 1, 2008 to December 31, 2011	40 CFR part 90.
(2) below 225 cc	January 1, 2012 or later	40 CFR part 1054.
(3) at or above 225 cc	July 1, 2008 to December 31, 2010	40 CFR part 90.
(4) at or above 225 cc	January 1, 2011 or later	40 CFR part 1054.

(b) Stationary SI internal combustion engine manufacturers must certify their stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) (except emergency stationary ICE with a maximum engine power greater than 25 HP and less than 130 HP) that use gasoline and that are manufactured on or after the applicable date in § 60.4230(a)(2), or manufactured on or after the applicable date in § 60.4230(a)(4) for emergency stationary ICE with a maximum engine power greater than or equal to 130 HP, to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 1048. Stationary SI internal combustion engine manufacturers must certify their emergency stationary SI ICE with a maximum engine power greater than 25 HP and less than 130 HP that are manufactured on or after the applicable date in § 60.4230(a)(4) to the Phase 1 emission standards in 40 CFR 90.103, applicable to class II engines, and other requirements for new nonroad SI engines in 40 CFR part 90. Stationary SI internal combustion engine manufacturers may certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cubic centimeters (cc) to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 90 or 1054, as appropriate.

(c) Stationary SI internal combustion engine manufacturers must certify their stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) (except emergency stationary ICE with a maximum engine power greater than 25 HP and less than 130 HP) that are rich burn engines that use LPG and that are manufactured on or after the applicable date in § 60.4230(a)(2), or manufactured on or after the applicable date in § 60.4230(a)(4) for emergency stationary ICE with a maximum engine power greater than or equal to 130 HP, to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 1048. Stationary SI internal combustion engine manufacturers must certify their emergency stationary SI ICE with a maximum engine power greater than 25 HP and less than 130 HP that are manufactured on or after the applicable date in § 60.4230(a)(4) to the Phase 1 emission standards in 40 CFR 90.103, applicable to class II engines, and other requirements for new nonroad SI engines in 40 CFR part 90. Stationary SI internal combustion engine manufacturers may certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cc to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 90 or 1054, as appropriate.

(d) Stationary SI internal combustion engine manufacturers who choose to certify their stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) (except gasoline and rich burn engines that use LPG and emergency stationary ICE with a maximum engine power greater than 25 HP and less than 130 HP) under the voluntary manufacturer certification program described in this subpart must certify those engines to the certification emission standards for new nonroad SI engines in 40 CFR part 1048. Stationary SI internal combustion engine manufacturers who

choose to certify their emergency stationary SI ICE greater than 25 HP and less than 130 HP, must certify those engines to the Phase 1 emission standards in 40 CFR 90.103, applicable to class II engines, for new nonroad SI engines in 40 CFR part 90. Stationary SI internal combustion engine manufacturers may certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cc to the certification emission standards for new nonroad SI engines in 40 CFR part 90 or 1054, as appropriate. For stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) (except gasoline and rich burn engines that use LPG and emergency stationary ICE with a maximum engine power greater than 25 HP and less than 130 HP) manufactured prior to January 1, 2011, manufacturers may choose to certify these engines to the standards in Table 1 to this subpart applicable to engines with a maximum engine power greater than or equal to 100 HP and less than 500 HP.

(e) Stationary SI internal combustion engine manufacturers who choose to certify their stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) under the voluntary manufacturer certification program described in this subpart must certify those engines to the emission standards in Table 1 to this subpart. Stationary SI internal combustion engine manufacturers may certify their stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) that are lean burn engines that use LPG to the certification emission standards for new nonroad SI engines in 40 CFR part 1048. For stationary SI ICE with a maximum engine power greater than or equal to 100 HP (75 KW) and less than 500 HP (373 KW) manufactured prior to January 1, 2011, and for stationary SI ICE with a maximum engine power greater than or equal to 500 HP (373 KW) manufactured prior to July 1, 2010, manufacturers may choose to certify these engines to the certification emission standards for new nonroad SI engines in 40 CFR part 1048 applicable to engines that are not severe duty engines.

(f) Manufacturers of equipment containing stationary SI internal combustion engines meeting the provisions of 40 CFR part 1054 must meet the provisions of 40 CFR part 1060, to the extent they apply to equipment manufacturers.

(g) Notwithstanding the requirements in paragraphs (a) through (c) of this section, stationary SI internal combustion engine manufacturers are not required to certify reconstructed engines; however manufacturers may elect to do so. The reconstructed engine must be certified to the emission standards specified in paragraphs (a) through (e) of this section that are applicable to the model year, maximum engine power and displacement of the reconstructed stationary SI ICE.

[73 FR 3591, Jan. 18, 2008, as amended by 73 FR 59175, Oct. 8, 2008; 76 FR 37973, June 28, 2011]

§ 60.4232 How long must my engines meet the emission standards if I am a manufacturer of stationary SI internal combustion engines?

Engines manufactured by stationary SI internal combustion engine manufacturers must meet the emission standards as required in § 60.4231 during the certified emissions life of the engines.

Emission Standards for Owners and Operators

§ 60.4233 What emission standards must I meet if I am an owner or operator of a stationary SI internal combustion engine?

(a) Owners and operators of stationary SI ICE with a maximum engine power less than or equal to 19 KW (25 HP) manufactured on or after July 1, 2008, must comply with the emission standards in § 60.4231(a) for their stationary SI ICE.

(b) Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) manufactured on or after the applicable date in § 60.4230(a)(4) that use gasoline must comply with the emission standards in § 60.4231(b) for their stationary SI ICE.

(c) Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) manufactured on or after the applicable date in § 60.4230(a)(4) that are rich burn engines that use LPG must comply with the emission standards in § 60.4231(c) for their stationary SI ICE.

(d) Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards for field testing in 40 CFR 1048.101(c) for their non-emergency stationary SI ICE and with the emission standards in Table 1 to this subpart for their emergency stationary SI ICE. Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) manufactured prior to January 1, 2011, that were certified to the standards in Table 1 to this subpart applicable to engines with a maximum engine power greater than or equal to 100 HP and less than 500 HP, may optionally choose to meet those standards.

(e) Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards in Table 1 to this subpart for their stationary SI ICE. For owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 100 HP (except gasoline and rich burn engines that use LPG) manufactured prior to January 1, 2011 that were certified to the certification emission standards in 40 CFR part 1048 applicable to engines that are not severe duty engines, if such stationary SI ICE was certified to a carbon monoxide (CO) standard above the standard in Table 1 to this subpart, then the owners and operators may meet the CO certification (not field testing) standard for which the engine was certified.

(f) Owners and operators of any modified or reconstructed stationary SI ICE subject to this subpart must meet the requirements as specified in paragraphs (f)(1) through (5) of this section.

(1) Owners and operators of stationary SI ICE with a maximum engine power less than or equal to 19 KW (25 HP), that are modified or reconstructed after June 12, 2006, must comply with emission standards in § 60.4231(a) for their stationary SI ICE. Engines with a date of manufacture prior to July 1, 2008 must comply with the emission standards specified in § 60.4231(a) applicable to engines manufactured on July 1, 2008.

(2) Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that are gasoline engines and are modified or reconstructed after June 12, 2006, must comply with the emission standards in § 60.4231(b) for their stationary SI ICE. Engines with a date of manufacture prior to July 1, 2008 (or January 1, 2009 for emergency engines) must comply with the emission standards specified in § 60.4231(b) applicable to engines manufactured on July 1, 2008 (or January 1, 2009 for emergency engines).

(3) Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that are rich burn engines that use LPG, that are modified or reconstructed after June 12, 2006, must comply with the same emission standards as those specified in § 60.4231(c). Engines with a date of manufacture prior to July 1, 2008 (or January 1, 2009 for emergency engines) must comply with the emission standards specified in § 60.4231(c) applicable to engines manufactured on July 1, 2008 (or January 1, 2009 for emergency engines).

(4) Owners and operators of stationary SI natural gas and lean burn LPG engines with a maximum engine power greater than 19 KW (25 HP), that are modified or reconstructed after June 12, 2006, must comply with the same emission standards as those specified in paragraph (d) or (e) of this section, except that such owners and operators of non-emergency engines and emergency engines greater than or equal

to 130 HP must meet a nitrogen oxides (NO_x) emission standard of 3.0 grams per HP-hour (g/HP-hr), a CO emission standard of 4.0 g/HP-hr (5.0 g/HP-hr for non-emergency engines less than 100 HP), and a volatile organic compounds (VOC) emission standard of 1.0 g/HP-hr, or a NO_x emission standard of 250 ppmvd at 15 percent oxygen (O_2), a CO emission standard 540 ppmvd at 15 percent O_2 (675 ppmvd at 15 percent O_2 for non-emergency engines less than 100 HP), and a VOC emission standard of 86 ppmvd at 15 percent O_2 , where the date of manufacture of the engine is:

(i) Prior to July 1, 2007, for non-emergency engines with a maximum engine power greater than or equal to 500 HP (except lean burn natural gas engines and LPG engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP);

(ii) Prior to July 1, 2008, for non-emergency engines with a maximum engine power less than 500 HP;

(iii) Prior to January 1, 2009, for emergency engines;

(iv) Prior to January 1, 2008, for non-emergency lean burn natural gas engines and LPG engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP.

(5) Owners and operators of stationary SI landfill/digester gas ICE engines with a maximum engine power greater than 19 KW (25 HP), that are modified or reconstructed after June 12, 2006, must comply with the same emission standards as those specified in paragraph (e) of this section for stationary landfill/digester gas engines. Engines with maximum engine power less than 500 HP and a date of manufacture prior to July 1, 2008 must comply with the emission standards specified in paragraph (e) of this section for stationary landfill/digester gas ICE with a maximum engine power less than 500 HP manufactured on July 1, 2008. Engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines greater than or equal to 500 HP and less than 1,350 HP) and a date of manufacture prior to July 1, 2007 must comply with the emission standards specified in paragraph (e) of this section for stationary landfill/digester gas ICE with a maximum engine power greater than or equal to 500 HP (except lean burn engines greater than or equal to 500 HP and less than 1,350 HP) manufactured on July 1, 2007. Lean burn engines greater than or equal to 500 HP and less than 1,350 HP with a date of manufacture prior to January 1, 2008 must comply with the emission standards specified in paragraph (e) of this section for stationary landfill/digester gas ICE that are lean burn engines greater than or equal to 500 HP and less than 1,350 HP and manufactured on January 1, 2008.

(g) Owners and operators of stationary SI wellhead gas ICE engines may petition the Administrator for approval on a case-by-case basis to meet emission standards no less stringent than the emission standards that apply to stationary emergency SI engines greater than 25 HP and less than 130 HP due to the presence of high sulfur levels in the fuel, as specified in Table 1 to this subpart. The request must, at a minimum, demonstrate that the fuel has high sulfur levels that prevent the use of aftertreatment controls and also that the owner has reasonably made all attempts possible to obtain an engine that will meet the standards without the use of aftertreatment controls. The petition must request the most stringent standards reasonably applicable to the engine using the fuel.

(h) Owners and operators of stationary SI ICE that are required to meet standards that reference 40 CFR 1048.101 must, if testing their engines in use, meet the standards in that section applicable to field testing, except as indicated in paragraph (e) of this section.

[73 FR 3591, Jan. 18, 2008, as amended at 76 FR 37973, June 28, 2011]

§ 60.4234 *How long must I meet the emission standards if I am an owner or operator of a stationary SI internal combustion engine?*

Owners and operators of stationary SI ICE must operate and maintain stationary SI ICE that achieve the emission standards as required in § 60.4233 over the entire life of the engine.

Other Requirements for Owners and Operators

§ 60.4235 *What fuel requirements must I meet if I am an owner or operator of a stationary SI gasoline fired internal combustion engine subject to this subpart?*

Owners and operators of stationary SI ICE subject to this subpart that use gasoline must use gasoline that meets the per gallon sulfur limit in 40 CFR 80.195.

§ 60.4236 *What is the deadline for importing or installing stationary SI ICE produced in previous model years?*

(a) After July 1, 2010, owners and operators may not install stationary SI ICE with a maximum engine power of less than 500 HP that do not meet the applicable requirements in § 60.4233.

(b) After July 1, 2009, owners and operators may not install stationary SI ICE with a maximum engine power of greater than or equal to 500 HP that do not meet the applicable requirements in § 60.4233, except that lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP that do not meet the applicable requirements in § 60.4233 may not be installed after January 1, 2010.

(c) For emergency stationary SI ICE with a maximum engine power of greater than 19 KW (25 HP), owners and operators may not install engines that do not meet the applicable requirements in § 60.4233 after January 1, 2011.

(d) In addition to the requirements specified in §§ 60.4231 and 60.4233, it is prohibited to import stationary SI ICE less than or equal to 19 KW (25 HP), stationary rich burn LPG SI ICE, and stationary gasoline SI ICE that do not meet the applicable requirements specified in paragraphs (a), (b), and (c) of this section, after the date specified in paragraph (a), (b), and (c) of this section.

(e) The requirements of this section do not apply to owners and operators of stationary SI ICE that have been modified or reconstructed, and they do not apply to engines that were removed from one existing location and reinstalled at a new location.

§ 60.4237 *What are the monitoring requirements if I am an owner or operator of an emergency stationary SI internal combustion engine?*

(a) Starting on July 1, 2010, if the emergency stationary SI internal combustion engine that is greater than or equal to 500 HP that was built on or after July 1, 2010, does not meet the standards applicable to non-emergency engines, the owner or operator must install a non-resettable hour meter.

(b) Starting on January 1, 2011, if the emergency stationary SI internal combustion engine that is greater than or equal to 130 HP and less than 500 HP that was built on or after January 1, 2011, does not meet the standards applicable to non-emergency engines, the owner or operator must install a non-resettable hour meter.

(c) If you are an owner or operator of an emergency stationary SI internal combustion engine that is less than 130 HP, was built on or after July 1, 2008, and does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter upon startup of your emergency engine.

Compliance Requirements for Manufacturers

§ 60.4238 What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines ≤19 KW (25 HP) or a manufacturer of equipment containing such engines?

Stationary SI internal combustion engine manufacturers who are subject to the emission standards specified in § 60.4231(a) must certify their stationary SI ICE using the certification procedures required in 40 CFR part 90, subpart B, or 40 CFR part 1054, subpart C, as applicable, and must test their engines as specified in those parts. Manufacturers of equipment containing stationary SI internal combustion engines meeting the provisions of 40 CFR part 1054 must meet the provisions of 40 CFR part 1060, subpart C, to the extent they apply to equipment manufacturers.

[73 FR 59176, Oct. 8, 2008]

§ 60.4239 What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines >19 KW (25 HP) that use gasoline or a manufacturer of equipment containing such engines?

Stationary SI internal combustion engine manufacturers who are subject to the emission standards specified in § 60.4231(b) must certify their stationary SI ICE using the certification procedures required in 40 CFR part 1048, subpart C, and must test their engines as specified in that part. Stationary SI internal combustion engine manufacturers who certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cc to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 90 or 40 CFR part 1054, and manufacturers of stationary SI emergency engines that are greater than 25 HP and less than 130 HP who meet the Phase 1 emission standards in 40 CFR 90.103, applicable to class II engines, must certify their stationary SI ICE using the certification procedures required in 40 CFR part 90, subpart B, or 40 CFR part 1054, subpart C, as applicable, and must test their engines as specified in those parts. Manufacturers of equipment containing stationary SI internal combustion engines meeting the provisions of 40 CFR part 1054 must meet the provisions of 40 CFR part 1060, subpart C, to the extent they apply to equipment manufacturers.

[73 FR 59176, Oct. 8, 2008]

§ 60.4240 What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines >19 KW (25 HP) that are rich burn engines that use LPG or a manufacturer of equipment containing such engines?

Stationary SI internal combustion engine manufacturers who are subject to the emission standards specified in § 60.4231(c) must certify their stationary SI ICE using the certification procedures required in 40 CFR part 1048, subpart C, and must test their engines as specified in that part. Stationary SI internal combustion engine manufacturers who certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cc to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 90 or 40 CFR part 1054, and manufacturers of stationary SI emergency engines that are greater than 25 HP and less than 130 HP who meet the Phase 1 emission standards in 40 CFR 90.103, applicable to class II engines, must certify their stationary SI ICE using the certification procedures required in 40 CFR part 90, subpart

B, or 40 CFR part 1054, subpart C, as applicable, and must test their engines as specified in those parts. Manufacturers of equipment containing stationary SI internal combustion engines meeting the provisions of 40 CFR part 1054 must meet the provisions of 40 CFR part 1060, subpart C, to the extent they apply to equipment manufacturers.

[73 FR 59176, Oct. 8, 2008]

§ 60.4241 What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines participating in the voluntary certification program or a manufacturer of equipment containing such engines?

(a) Manufacturers of stationary SI internal combustion engines with a maximum engine power greater than 19 KW (25 HP) that do not use gasoline and are not rich burn engines that use LPG can choose to certify their engines to the emission standards in § 60.4231(d) or (e), as applicable, under the voluntary certification program described in this subpart. Manufacturers who certify their engines under the voluntary certification program must meet the requirements as specified in paragraphs (b) through (g) of this section. In addition, manufacturers of stationary SI internal combustion engines who choose to certify their engines under the voluntary certification program, must also meet the requirements as specified in § 60.4247.

(b) Manufacturers of engines other than those certified to standards in 40 CFR part 90 or 40 CFR part 1054 must certify their stationary SI ICE using the certification procedures required in 40 CFR part 1048, subpart C, and must follow the same test procedures that apply to large SI nonroad engines under 40 CFR part 1048, but must use the D-1 cycle of International Organization of Standardization 8178-4: 1996(E) (incorporated by reference, see 40 CFR 60.17) or the test cycle requirements specified in Table 3 to 40 CFR 1048.505, except that Table 3 of 40 CFR 1048.505 applies to high load engines only. Stationary SI internal combustion engine manufacturers who certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cc to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 90 or 40 CFR part 1054, and manufacturers of emergency engines that are greater than 25 HP and less than 130 HP who meet the Phase 1 standards in 40 CFR 90.103, applicable to class II engines, must certify their stationary SI ICE using the certification procedures required in 40 CFR part 90, subpart B, or 40 CFR part 1054, subpart C, as applicable, and must test their engines as specified in those parts. Manufacturers of equipment containing stationary SI internal combustion engines meeting the provisions of 40 CFR part 1054 must meet the provisions of 40 CFR part 1060, subpart C, to the extent they apply to equipment manufacturers.

(c) Certification of stationary SI ICE to the emission standards specified in § 60.4231(d) or (e), as applicable, is voluntary, but manufacturers who decide to certify are subject to all of the requirements indicated in this subpart with regard to the engines included in their certification. Manufacturers must clearly label their stationary SI engines as certified or non-certified engines.

(d) Manufacturers of natural gas fired stationary SI ICE who conduct voluntary certification of stationary SI ICE to the emission standards specified in § 60.4231(d) or (e), as applicable, must certify their engines for operation using fuel that meets the definition of pipeline-quality natural gas. The fuel used for certifying stationary SI natural gas engines must meet the definition of pipeline-quality natural gas as described in § 60.4248. In addition, the manufacturer must provide information to the owner and operator of the certified stationary SI engine including the specifications of the pipeline-quality natural gas to which the engine is certified and what adjustments the owner or operator must make to the engine when installed in the field to ensure compliance with the emission standards.

(e) Manufacturers of stationary SI ICE that are lean burn engines fueled by LPG who conduct voluntary certification of stationary SI ICE to the emission standards specified in § 60.4231(d) or (e), as applicable, must certify their engines for operation using fuel that meets the specifications in 40 CFR 1065.720.

(f) Manufacturers may certify their engines for operation using gaseous fuels in addition to pipeline-quality natural gas; however, the manufacturer must specify the properties of that fuel and provide testing information showing that the engine will meet the emission standards specified in § 60.4231(d) or (e), as applicable, when operating on that fuel. The manufacturer must also provide instructions for configuring the stationary engine to meet the emission standards on fuels that do not meet the pipeline-quality natural gas definition. The manufacturer must also provide information to the owner and operator of the certified stationary SI engine regarding the configuration that is most conducive to reduced emissions where the engine will be operated on gaseous fuels with different quality than the fuel that it was certified to.

(g) A stationary SI engine manufacturer may certify an engine family solely to the standards applicable to landfill/digester gas engines as specified in § 60.4231(d) or (e), as applicable, but must certify their engines for operation using landfill/digester gas and must add a permanent label stating that the engine is for use only in landfill/digester gas applications. The label must be added according to the labeling requirements specified in 40 CFR 1048.135(b).

(h) For purposes of this subpart, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included.

(i) For engines being certified to the voluntary certification standards in Table 1 of this subpart, the VOC measurement shall be made by following the procedures in 40 CFR 1065.260 and 1065.265 in order to determine the total NMHC emissions by using a flame-ionization detector and non-methane cutter. As an alternative to the nonmethane cutter, manufacturers may use a gas chromatograph as allowed under 40 CFR 1065.267 and may measure ethane, as well as methane, for excluding such levels from the total VOC measurement.

[73 FR 3591, Jan. 18, 2008, as amended by 73 FR 59176, Oct. 8, 2008; 76 FR 37974, June 28, 2011]

§ 60.4242 What other requirements must I meet if I am a manufacturer of stationary SI internal combustion engines or equipment containing stationary SI internal combustion engines or a manufacturer of equipment containing such engines?

(a) Stationary SI internal combustion engine manufacturers must meet the provisions of 40 CFR part 90, 40 CFR part 1048, or 40 CFR part 1054, as applicable, as well as 40 CFR part 1068 for engines that are certified to the emission standards in 40 CFR part 1048 or 1054, except that engines certified pursuant to the voluntary certification procedures in § 60.4241 are subject only to the provisions indicated in § 60.4247 and are permitted to provide instructions to owners and operators allowing for deviations from certified configurations, if such deviations are consistent with the provisions of paragraphs § 60.4241(c) through (f). Manufacturers of equipment containing stationary SI internal combustion engines meeting the provisions of 40 CFR part 1054 must meet the provisions of 40 CFR part 1060, as applicable. Labels on engines certified to 40 CFR part 1048 must refer to stationary engines, rather than or in addition to nonroad engines, as appropriate.

(b) An engine manufacturer certifying an engine family or families to standards under this subpart that are identical to standards applicable under 40 CFR part 90, 40 CFR part 1048, or 40 CFR part 1054 for that model year may certify any such family that contains both nonroad and stationary engines as a single engine family and/or may include any such family containing stationary engines in the averaging, banking and trading provisions applicable for such engines under those parts. This provision also applies to equipment or component manufacturers certifying to standards under 40 CFR part 1060.

(c) Manufacturers of engine families certified to 40 CFR part 1048 may meet the labeling requirements referred to in paragraph (a) of this section for stationary SI ICE by either adding a separate label

containing the information required in paragraph (a) of this section or by adding the words “and stationary” after the word “nonroad” to the label.

(d) For all engines manufactured on or after January 1, 2011, and for all engines with a maximum engine power greater than 25 HP and less than 130 HP manufactured on or after July 1, 2008, a stationary SI engine manufacturer that certifies an engine family solely to the standards applicable to emergency engines must add a permanent label stating that the engines in that family are for emergency use only. The label must be added according to the labeling requirements specified in 40 CFR 1048.135(b).

(e) All stationary SI engines subject to mandatory certification that do not meet the requirements of this subpart must be labeled according to 40 CFR 1068.230 and must be exported under the provisions of 40 CFR 1068.230. Stationary SI engines subject to standards in 40 CFR part 90 may use the provisions in 40 CFR 90.909. Manufacturers of stationary engines with a maximum engine power greater than 25 HP that are not certified to standards and other requirements under 40 CFR part 1048 are subject to the labeling provisions of 40 CFR 1048.20 pertaining to excluded stationary engines.

(f) For manufacturers of gaseous-fueled stationary engines required to meet the warranty provisions in 40 CFR 90.1103 or 1054.120, we may establish an hour-based warranty period equal to at least the certified emissions life of the engines (in engine operating hours) if we determine that these engines are likely to operate for a number of hours greater than the applicable useful life within 24 months. We will not approve an alternate warranty under this paragraph (f) for nonroad engines. An alternate warranty period approved under this paragraph (f) will be the specified number of engine operating hours or two years, whichever comes first. The engine manufacturer shall request this alternate warranty period in its application for certification or in an earlier submission. We may approve an alternate warranty period for an engine family subject to the following conditions:

(1) The engines must be equipped with non-resettable hour meters.

(2) The engines must be designed to operate for a number of hours substantially greater than the applicable certified emissions life.

(3) The emission-related warranty for the engines may not be shorter than any published warranty offered by the manufacturer without charge for the engines. Similarly, the emission-related warranty for any component shall not be shorter than any published warranty offered by the manufacturer without charge for that component.

[73 FR 3591, Jan. 18, 2008, as amended by 73 FR 59177, Oct. 8, 2008]

Compliance Requirements for Owners and Operators

§ 60.4243 What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?

[Link to an amendment published at 78 FR 6697, Jan. 30, 2013.](#)

(a) If you are an owner or operator of a stationary SI internal combustion engine that is manufactured after July 1, 2008, and must comply with the emission standards specified in § 60.4233(a) through (c), you must comply by purchasing an engine certified to the emission standards in § 60.4231(a) through (c), as applicable, for the same engine class and maximum engine power. In addition, you must meet one of the requirements specified in (a)(1) and (2) of this section.

(1) If you operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, you must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required if you are an owner or operator. You must also meet the requirements as specified in 40 CFR part 1068, subparts A through D, as they apply to you. If you adjust engine settings according to and consistent with the manufacturer's instructions, your stationary SI internal combustion engine will not be considered out of compliance.

(2) If you do not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, your engine will be considered a non-certified engine, and you must demonstrate compliance according to (a)(2)(i) through (iii) of this section, as appropriate.

(i) If you are an owner or operator of a stationary SI internal combustion engine less than 100 HP, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions, but no performance testing is required if you are an owner or operator.

(ii) If you are an owner or operator of a stationary SI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test within 1 year of engine startup to demonstrate compliance.

(iii) If you are an owner or operator of a stationary SI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test within 1 year of engine startup and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.

(b) If you are an owner or operator of a stationary SI internal combustion engine and must comply with the emission standards specified in § 60.4233(d) or (e), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) and (2) of this section.

(1) Purchasing an engine certified according to procedures specified in this subpart, for the same model year and demonstrating compliance according to one of the methods specified in paragraph (a) of this section.

(2) Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in § 60.4233(d) or (e) and according to the requirements specified in § 60.4244, as applicable, and according to paragraphs (b)(2)(i) and (ii) of this section.

(i) If you are an owner or operator of a stationary SI internal combustion engine greater than 25 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance.

(ii) If you are an owner or operator of a stationary SI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test and conduct

subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.

(c) If you are an owner or operator of a stationary SI internal combustion engine that must comply with the emission standards specified in § 60.4233(f), you must demonstrate compliance according paragraph (b)(2)(i) or (ii) of this section, except that if you comply according to paragraph (b)(2)(i) of this section, you demonstrate that your non-certified engine complies with the emission standards specified in § 60.4233(f).

(d) Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited.

(e) Owners and operators of stationary SI natural gas fired engines may operate their engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the owners and operators are required to conduct a performance test to demonstrate compliance with the emission standards of § 60.4233.

(f) If you are an owner or operator of a stationary SI internal combustion engine that is less than or equal to 500 HP and you purchase a non-certified engine or you do not operate and maintain your certified stationary SI internal combustion engine and control device according to the manufacturer's written emission-related instructions, you are required to perform initial performance testing as indicated in this section, but you are not required to conduct subsequent performance testing unless the stationary engine is rebuilt or undergoes major repair or maintenance. A rebuilt stationary SI ICE means an engine that has been rebuilt as that term is defined in 40 CFR 94.11(a).

(g) It is expected that air-to-fuel ratio controllers will be used with the operation of three-way catalysts/non-selective catalytic reduction. The AFR controller must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times.

(h) If you are an owner/operator of an stationary SI internal combustion engine with maximum engine power greater than or equal to 500 HP that is manufactured after July 1, 2007 and before July 1, 2008, and must comply with the emission standards specified in sections 60.4233(b) or (c), you must comply by one of the methods specified in paragraphs (h)(1) through (h)(4) of this section.

(1) Purchasing an engine certified according to 40 CFR part 1048. The engine must be installed and configured according to the manufacturer's specifications.

(2) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.

(3) Keeping records of engine manufacturer data indicating compliance with the standards.

(4) Keeping records of control device vendor data indicating compliance with the standards.

(i) If you are an owner or operator of a modified or reconstructed stationary SI internal combustion engine and must comply with the emission standards specified in § 60.4233(f), you must demonstrate compliance according to one of the methods specified in paragraphs (i)(1) or (2) of this section.

(1) Purchasing, or otherwise owning or operating, an engine certified to the emission standards in § 60.4233(f), as applicable.

(2) Conducting a performance test to demonstrate initial compliance with the emission standards according to the requirements specified in § 60.4244. The test must be conducted within 60 days after the engine commences operation after the modification or reconstruction.

[73 FR 3591, Jan. 18, 2008, as amended at 76 FR 37974, June 28, 2011]

Testing Requirements for Owners and Operators

§ 60.4244 What test methods and other procedures must I use if I am an owner or operator of a stationary SI internal combustion engine?

Owners and operators of stationary SI ICE who conduct performance tests must follow the procedures in paragraphs (a) through (f) of this section.

(a) Each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements in § 60.8 and under the specific conditions that are specified by Table 2 to this subpart.

(b) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in § 60.8(c). If your stationary SI internal combustion engine is non-operational, you do not need to startup the engine solely to conduct a performance test; however, you must conduct the performance test immediately upon startup of the engine.

(c) You must conduct three separate test runs for each performance test required in this section, as specified in § 60.8(f). Each test run must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and last at least 1 hour.

(d) To determine compliance with the NO_x mass per unit output emission limitation, convert the concentration of NO_x in the engine exhaust using Equation 1 of this section:

$$ER = \frac{C_a \times 1.912 \times 10^{-3} \times Q \times T}{HP - hr} \quad (\text{Eq. 1})$$

Where:

ER = Emission rate of NO_x in g/HP-hr.

C_d = Measured NO_x concentration in parts per million by volume (ppmv).

1.912×10^{-3} = Conversion constant for ppm NO_x to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, horsepower-hour (HP-hr).

(e) To determine compliance with the CO mass per unit output emission limitation, convert the concentration of CO in the engine exhaust using Equation 2 of this section:

$$ER = \frac{C_d \times 1.164 \times 10^{-3} \times Q \times T}{HP - hr} \quad (\text{Eq. 2})$$

Where:

ER = Emission rate of CO in g/HP-hr.

C_d = Measured CO concentration in ppmv.

1.164×10^{-3} = Conversion constant for ppm CO to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP-hr.

(f) For purposes of this subpart, when calculating emissions of VOC, emissions of formaldehyde should not be included. To determine compliance with the VOC mass per unit output emission limitation, convert the concentration of VOC in the engine exhaust using Equation 3 of this section:

$$ER = \frac{C_d \times 1.833 \times 10^{-3} \times Q \times T}{HP - hr} \quad (\text{Eq. 3})$$

Where:

ER = Emission rate of VOC in g/HP-hr.

C_d = VOC concentration measured as propane in ppmv.

1.833×10^{-3} = Conversion constant for ppm VOC measured as propane, to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP-hr.

(g) If the owner/operator chooses to measure VOC emissions using either Method 18 of 40 CFR part 60, appendix A, or Method 320 of 40 CFR part 63, appendix A, then it has the option of correcting the measured VOC emissions to account for the potential differences in measured values between these methods and Method 25A. The results from Method 18 and Method 320 can be corrected for response

factor differences using Equations 4 and 5 of this section. The corrected VOC concentration can then be placed on a propane basis using Equation 6 of this section.

$$RF_i = \frac{C_{Ai}}{C_{Mi}} \quad (\text{Eq. 4})$$

Where:

RF_i = Response factor of compound i when measured with EPA Method 25A.

C_{Mi} = Measured concentration of compound i in ppmv as carbon.

C_{Ai} = True concentration of compound i in ppmv as carbon.

$$C_{i\text{ corr}} = RF_i \times C_{i\text{ meas}} \quad (\text{Eq. 5})$$

Where:

$C_{i\text{ corr}}$ = Concentration of compound i corrected to the value that would have been measured by EPA Method 25A, ppmv as carbon.

$C_{i\text{ meas}}$ = Concentration of compound i measured by EPA Method 320, ppmv as carbon.

$$C_{\text{Peq}} = 0.6098 \times C_{i\text{ corr}} \quad (\text{Eq. 6})$$

Where:

C_{Peq} = Concentration of compound i in mg of propane equivalent per DSCM.

Notification, Reports, and Records for Owners and Operators

§ 60.4245 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?

[Link to an amendment published at 78 FR 6697, Jan. 30, 2013.](#)

Owners or operators of stationary SI ICE must meet the following notification, reporting and recordkeeping requirements.

(a) Owners and operators of all stationary SI ICE must keep records of the information in paragraphs (a)(1) through (4) of this section.

(1) All notifications submitted to comply with this subpart and all documentation supporting any notification.

(2) Maintenance conducted on the engine.

(3) If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable.

(4) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to § 60.4243(a)(2), documentation that the engine meets the emission standards.

(b) For all stationary SI emergency ICE greater than or equal to 500 HP manufactured on or after July 1, 2010, that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. For all stationary SI emergency ICE greater than or equal to 130 HP and less than 500 HP manufactured on or after July 1, 2011 that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. For all stationary SI emergency ICE greater than 25 HP and less than 130 HP manufactured on or after July 1, 2008, that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

(c) Owners and operators of stationary SI ICE greater than or equal to 500 HP that have not been certified by an engine manufacturer to meet the emission standards in § 60.4231 must submit an initial notification as required in § 60.7(a)(1). The notification must include the information in paragraphs (c)(1) through (5) of this section.

(1) Name and address of the owner or operator;

(2) The address of the affected source;

(3) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;

(4) Emission control equipment; and

(5) Fuel used.

(d) Owners and operators of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in § 60.4244 within 60 days after the test has been completed.

[73 FR 3591, Jan. 18, 2008, as amended by 73 FR 59177, Oct. 8, 2008]

General Provisions

§ 60.4246 What parts of the General Provisions apply to me?

Table 3 to this subpart shows which parts of the General Provisions in §§ 60.1 through 60.19 apply to you.

Mobile Source Provisions

§ 60.4247 What parts of the mobile source provisions apply to me if I am a manufacturer of stationary SI internal combustion engines or a manufacturer of equipment containing such engines?

(a) Manufacturers certifying to emission standards in 40 CFR part 90, including manufacturers certifying emergency engines below 130 HP, must meet the provisions of 40 CFR part 90. Manufacturers certifying to emission standards in 40 CFR part 1054 must meet the provisions of 40 CFR part 1054. Manufacturers of equipment containing stationary SI internal combustion engines meeting the provisions of 40 CFR part 1054 must meet the provisions of 40 CFR part 1060 to the extent they apply to equipment manufacturers.

(b) Manufacturers required to certify to emission standards in 40 CFR part 1048 must meet the provisions of 40 CFR part 1048. Manufacturers certifying to emission standards in 40 CFR part 1048 pursuant to the voluntary certification program must meet the requirements in Table 4 to this subpart as well as the standards in 40 CFR 1048.101.

(c) For manufacturers of stationary SI internal combustion engines participating in the voluntary certification program and certifying engines to Table 1 to this subpart, Table 4 to this subpart shows which parts of the mobile source provisions in 40 CFR parts 1048, 1065, and 1068 apply to you. Compliance with the deterioration factor provisions under 40 CFR 1048.205(n) and 1048.240 will be required for engines built new on and after January 1, 2010. Prior to January 1, 2010, manufacturers of stationary internal combustion engines participating in the voluntary certification program have the option to develop their own deterioration factors based on an engineering analysis.

[73 FR 3591, Jan. 18, 2008, as amended by 73 FR 59177, Oct. 8, 2008]

Definitions

§ 60.4248 What definitions apply to this subpart?

[Link to an amendment published at 78 FR 6698, Jan. 30, 2013.](#)

As used in this subpart, all terms not defined herein shall have the meaning given them in the CAA and in subpart A of this part.

Certified emissions life means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. The values for certified emissions life for stationary SI ICE with a maximum engine power less than or equal to 19 KW (25 HP) are given in 40 CFR 90.105, 40 CFR 1054.107, and 40 CFR 1060.101, as appropriate. The values for certified emissions life for stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) certified to 40 CFR part 1048 are given in 40 CFR 1048.101(g). The certified emissions life for stationary SI ICE with a maximum engine power greater than 75 KW (100 HP) certified under the voluntary manufacturer certification program of this subpart is 5,000 hours or 7 years, whichever comes first. You may request in your application for certification that we approve a shorter certified emissions life for an engine family. We may approve a shorter certified emissions life, in hours of engine operation but not in years, if we determine that these engines will rarely operate longer than the shorter certified emissions life. If engines identical to those in the engine family have already been produced and are in use, your demonstration must include documentation from such in-use engines. In other cases, your demonstration must include an engineering analysis of information equivalent to such in-use data, such as data from research engines or similar engine models that are already in production. Your demonstration must also include any overhaul interval that you recommend, any mechanical warranty that you offer for the engine or its components, and any relevant customer design specifications. Your demonstration may include any other relevant information. The certified emissions life value may not be shorter than any of the following:

- (i) 1,000 hours of operation.
- (ii) Your recommended overhaul interval.
- (iii) Your mechanical warranty for the engine.

Certified stationary internal combustion engine means an engine that belongs to an engine family that has a certificate of conformity that complies with the emission standards and requirements in this part, or of 40 CFR part 90, 40 CFR part 1048, or 40 CFR part 1054, as appropriate.

Combustion turbine means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), and any ancillary components and sub-components comprising any simple cycle combustion turbine, any regenerative/recuperative cycle combustion turbine, the combustion turbine portion of any cogeneration cycle combustion system, or the combustion turbine portion of any combined cycle steam/electric generating system.

Compression ignition means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

Date of manufacture means one of the following things:

(1) For freshly manufactured engines and modified engines, date of manufacture means the date the engine is originally produced.

(2) For reconstructed engines, date of manufacture means the date the engine was originally produced, except as specified in paragraph (3) of this definition.

(3) Reconstructed engines are assigned a new date of manufacture if the fixed capital cost of the new and refurbished components exceeds 75 percent of the fixed capital cost of a comparable entirely new facility. An engine that is produced from a previously used engine block does not retain the date of manufacture of the engine in which the engine block was previously used if the engine is produced using all new components except for the engine block. In these cases, the date of manufacture is the date of reconstruction or the date the new engine is produced.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is number 2 distillate oil.

Digester gas means any gaseous by-product of wastewater treatment typically formed through the anaerobic decomposition of organic waste materials and composed principally of methane and carbon dioxide (CO₂).

Emergency stationary internal combustion engine means any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc. Stationary SI ICE used for peak shaving are not considered emergency stationary ICE. Stationary ICE used to supply power to an electric grid or that supply power as part of a financial arrangement with another entity are not considered to be emergency engines.

Engine manufacturer means the manufacturer of the engine. See the definition of "manufacturer" in this section.

Four-stroke engine means any type of engine which completes the power cycle in two crankshaft revolutions, with intake and compression strokes in the first revolution and power and exhaust strokes in the second revolution.

Freshly manufactured engine means an engine that has not been placed into service. An engine becomes freshly manufactured when it is originally produced.

Gasoline means any fuel sold in any State for use in motor vehicles and motor vehicle engines, or nonroad or stationary engines, and commonly or commercially known or sold as gasoline.

Installed means the engine is placed and secured at the location where it is intended to be operated.

Landfill gas means a gaseous by-product of the land application of municipal refuse typically formed through the anaerobic decomposition of waste materials and composed principally of methane and CO₂.

Lean burn engine means any two-stroke or four-stroke spark ignited engine that does not meet the definition of a rich burn engine.

Liquefied petroleum gas means any liquefied hydrocarbon gas obtained as a by-product in petroleum refining or natural gas production.

Manufacturer has the meaning given in section 216(1) of the Clean Air Act. In general, this term includes any person who manufactures a stationary engine for sale in the United States or otherwise introduces a new stationary engine into commerce in the United States. This includes importers who import stationary engines for resale.

Maximum engine power means maximum engine power as defined in 40 CFR 1048.801.

Model year means the calendar year in which an engine is manufactured (see "date of manufacture"), except as follows:

(1) Model year means the annual new model production period of the engine manufacturer in which an engine is manufactured (see "date of manufacture"), if the annual new model production period is different than the calendar year and includes January 1 of the calendar year for which the model year is named. It may not begin before January 2 of the previous calendar year and it must end by December 31 of the named calendar year.

(2) For an engine that is converted to a stationary engine after being placed into service as a nonroad or other non-stationary engine, model year means the calendar year or new model production period in which the engine was manufactured (see "date of manufacture").

Natural gas means a naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in geologic formations beneath the Earth's surface, of which the principal constituent is methane. Natural gas may be field or pipeline quality.

Other internal combustion engine means any internal combustion engine, except combustion turbines, which is not a reciprocating internal combustion engine or rotary internal combustion engine.

Pipeline-quality natural gas means a naturally occurring fluid mixture of hydrocarbons (e.g., methane, ethane, or propane) produced in geological formations beneath the Earth's surface that maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions, and which is provided by a supplier through a pipeline. Pipeline-quality natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1,100 British thermal units per standard cubic foot.

Rich burn engine means any four-stroke spark ignited engine where the manufacturer's recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio at full load conditions is less than or equal to 1.1. Engines originally manufactured as rich burn engines, but modified prior to June 12, 2006, with passive emission control technology for NO_x (such as pre-combustion chambers) will be considered lean burn engines. Also, existing engines where there are no manufacturer's recommendations regarding air/fuel ratio will be considered a rich burn engine if the excess oxygen content of the exhaust at full load conditions is less than or equal to 2 percent.

Rotary internal combustion engine means any internal combustion engine which uses rotary motion to convert heat energy into mechanical work.

Spark ignition means relating to either: a gasoline-fueled engine; or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for compression ignition and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

Stationary internal combustion engine means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary internal combustion engine is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle, aircraft, or a vehicle used solely for competition. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

Stationary internal combustion engine test cell/stand means an engine test cell/stand, as defined in 40 CFR part 63, subpart PPPPP, that tests stationary ICE.

Stoichiometric means the theoretical air-to-fuel ratio required for complete combustion.

Subpart means 40 CFR part 60, subpart JJJJ.

Two-stroke engine means a type of engine which completes the power cycle in single crankshaft revolution by combining the intake and compression operations into one stroke and the power and exhaust operations into a second stroke. This system requires auxiliary scavenging and inherently runs lean of stoichiometric.

Volatile organic compounds means volatile organic compounds as defined in 40 CFR 51.100(s).

Voluntary certification program means an optional engine certification program that manufacturers of stationary SI internal combustion engines with a maximum engine power greater than 19 KW (25 HP) that do not use gasoline and are not rich burn engines that use LPG can choose to participate in to certify their engines to the emission standards in § 60.4231(d) or (e), as applicable.

[73 FR 3591, Jan. 18, 2008, as amended by 73 FR 59177, Oct. 8, 2008; 76 FR 37974, June 28, 2011]

Table 1 to Subpart JJJJ of Part 60—NO_x, CO, and VOC Emission Standards for Stationary Non-Emergency SI Engines ≥100 HP (Except Gasoline and Rich Burn LPG), Stationary SI Landfill/Digester Gas Engines, and Stationary Emergency Engines >25 HP

Engine type and fuel	Maximum engine power	Manufacture date	Emission standards ^a					
			g/HP-hr			ppmvd at 15% O ₂		
			NO _x	CO	VOC ^d	NO _x	CO	VOC ^d
Non-Emergency SI Natural Gas ^b and Non-Emergency SI Lean Burn LPG ^b	100≤HP<500	7/1/2008	2.0	4.0	1.0	160	540	86

		1/1/2011	1.0	2.0	0.7	82	270	60
Non-Emergency SI Lean Burn Natural Gas and LPG	500≤HP<1,350	1/1/2008	2.0	4.0	1.0	160	540	86
		7/1/2010	1.0	2.0	0.7	82	270	60
Non-Emergency SI Natural Gas and Non-Emergency SI Lean Burn LPG (except lean burn 500≤HP<1,350)	HP≥500	7/1/2007	2.0	4.0	1.0	160	540	86
	HP≥500	7/1/2010	1.0	2.0	0.7	82	270	60
Landfill/Digester Gas (except lean burn 500≤HP<1,350)	HP<500	7/1/2008	3.0	5.0	1.0	220	610	80
		1/1/2011	2.0	5.0	1.0	150	610	80
	HP≥500	7/1/2007	3.0	5.0	1.0	220	610	80
		7/1/2010	2.0	5.0	1.0	150	610	80
Landfill/Digester Gas Lean Burn	500≤HP<1,350	1/1/2008	3.0	5.0	1.0	220	610	80
		7/1/2010	2.0	5.0	1.0	150	610	80
Emergency	25<HP<130	1/1/2009	^c 10	387	N/A	N/A	N/A	N/A
	HP≥130		2.0	4.0	1.0	160	540	86

^a Owners and operators of stationary non-certified SI engines may choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15 percent O₂.

^b Owners and operators of new or reconstructed non-emergency lean burn SI stationary engines with a site rating of greater than or equal to 250 brake HP located at a major source that are meeting the requirements of 40 CFR part 63, subpart ZZZZ, Table 2a do not have to comply with the CO emission standards of Table 1 of this subpart.

^c The emission standards applicable to emergency engines between 25 HP and 130 HP are in terms of NO_x+ HC.

^d For purposes of this subpart, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included.

[76 FR 37975, June 28, 2011]

Table 2 to Subpart JJJJ of Part 60—Requirements for Performance Tests

[Link to an amendment published at 78 FR 6698, Jan. 30, 2013.](#)

As stated in § 60.4244, you must comply with the following requirements for performance tests within 10 percent of 100 percent peak (or the highest achievable) load:

For each	Complying with the requirement to	You must	Using	According to the following requirements
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1. Stationary SI internal combustion engine demonstrating compliance according to § 60.4244	a. limit the concentration of NO _x in the stationary SI internal combustion engine exhaust	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, Appendix A or ASTM Method D6522-00(2005) ^a	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O ₂ concentration of the stationary internal combustion engine exhaust at the sampling port location;	(2) Method 3, 3A, or 3B ^b of 40 CFR part 60, appendix A or ASTM Method D6522-00(2005) ^a	(b) Measurements to determine O ₂ concentration must be made at the same time as the measurements for NO _x concentration.
		iii. If necessary, determine the exhaust flowrate of the stationary internal combustion engine exhaust;	(3) Method 2 or 19 of 40 CFR part 60	
		iv. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(4) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see § 60.17)	(c) Measurements to determine moisture must be made at the same time as the measurement for NO _x concentration.
		v. Measure NO _x at the exhaust of the stationary internal combustion engine	(5) Method 7E of 40 CFR part 60, appendix A, Method D6522-00(2005) ^a , Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see § 60.17)	(d) Results of this test consist of the average of the three 1-hour or longer runs.
	b. limit the concentration of CO in the stationary SI internal combustion engine exhaust	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, Appendix A or ASTM Method D6522-00(2005) ^a	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O ₂ concentration of the stationary internal combustion engine exhaust at the sampling port location;	(2) Method 3, 3A, or 3B ^b of 40 CFR part 60, appendix A or ASTM Method D6522-00(2005) ^a	(b) Measurements to determine O ₂ concentration must be made at the same time as the measurements for CO concentration.

		iii. If necessary, determine the exhaust flowrate of the stationary internal combustion engine exhaust;	(3) Method 2 or 19 of 40 CFR part 60	
		iv. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(4) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see § 60.17)	(c) Measurements to determine moisture must be made at the same time as the measurement for CO concentration.
		v. Measure CO at the exhaust of the stationary internal combustion engine	(5) Method 10 of 40 CFR part 60, appendix A, ASTM Method D6522-00(2005) ^a , Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see § 60.17)	(d) Results of this test consist of the average of the three 1-hour or longer runs.
	c. limit the concentration of VOC in the stationary SI internal combustion engine exhaust	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, Appendix A	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O ₂ concentration of the stationary internal combustion engine exhaust at the sampling port location;	(2) Method 3, 3A, or 3B ^b of 40 CFR part 60, appendix A or ASTM Method D6522-00(2005) ^a	(b) Measurements to determine O ₂ concentration must be made at the same time as the measurements for VOC concentration.
		iii. If necessary, determine the exhaust flowrate of the stationary internal combustion engine exhaust;	(3) Method 2 or 19 of 40 CFR part 60	
		iv. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(4) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see § 60.17)	(c) Measurements to determine moisture must be made at the same time as the measurement for VOC concentration.

		v. Measure VOC at the exhaust of the stationary internal combustion engine	(5) Methods 25A and 18 of 40 CFR part 60, appendix A, Method 25A with the use of a methane cutter as described in 40 CFR 1065.265, Method 18 or 40 CFR part 60, appendix A ^{c,d} , Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see § 60.17)	(d) Results of this test consist of the average of the three 1-hour or longer runs.
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[76 FR 37975, June 28, 2011]

Table 3 to Subpart JJJJ of Part 60—Applicability of General Provisions to Subpart JJJJ

[As stated in § 60.4246, you must comply with the following applicable General Provisions]

General provisions citation	Subject of citation	Applies to subpart	Explanation
§ 60.1	General applicability of the General Provisions	Yes	
§ 60.2	Definitions	Yes	Additional terms defined in § 60.4248.
§ 60.3	Units and abbreviations	Yes	
§ 60.4	Address	Yes	
§ 60.5	Determination of construction or modification	Yes	
§ 60.6	Review of plans	Yes	
§ 60.7	Notification and Recordkeeping	Yes	Except that § 60.7 only applies as specified in § 60.4245.
§ 60.8	Performance tests	Yes	Except that § 60.8 only applies to owners and operators who are subject to performance testing in subpart JJJJ.
§ 60.9	Availability of information	Yes	
§ 60.10	State Authority	Yes	
§ 60.11	Compliance with standards and maintenance requirements	Yes	Requirements are specified in subpart JJJJ.
§ 60.12	Circumvention	Yes	
§ 60.13	Monitoring requirements	No	

§ 60.14	Modification	Yes	
§ 60.15	Reconstruction	Yes	
§ 60.16	Priority list	Yes	
§ 60.17	Incorporations by reference	Yes	
§ 60.18	General control device requirements	No	
§ 60.19	General notification and reporting requirements	Yes	

Table 4 to Subpart JJJJ of Part 60—Applicability of Mobile Source Provisions for Manufacturers Participating in the Voluntary Certification Program and Certifying Stationary SI ICE to Emission Standards in Table 1 of Subpart JJJJ

[As stated in § 60.4247, you must comply with the following applicable mobile source provisions if you are a manufacturer participating in the voluntary certification program and certifying stationary SI ICE to emission standards in Table 1 of subpart JJJJ]

Mobile source provisions citation	Subject of citation	Applies to subpart	Explanation
1048 subpart A	Overview and Applicability	Yes	
1048 subpart B	Emission Standards and Related Requirements	Yes	Except for the specific sections below.
1048.101	Exhaust Emission Standards	No	
1048.105	Evaporative Emission Standards	No	
1048.110	Diagnosing Malfunctions	No	
1048.140	Certifying Blue Sky Series Engines	No	
1048.145	Interim Provisions	No	
1048 subpart C	Certifying Engine Families	Yes	Except for the specific sections below.
1048.205(b)	AECD reporting	Yes	
1048.205(c)	OBD Requirements	No	
1048.205(n)	Deterioration Factors	Yes	Except as indicated in 60.4247(c).
1048.205(p)(1)	Deterioration Factor Discussion	Yes	
1048.205(p)(2)	Liquid Fuels as they require	No	
1048.240(b)(c)(d)	Deterioration Factors	Yes	
1048 subpart D	Testing Production-Line Engines	Yes	
1048 subpart E	Testing In-Use Engines	No	
1048 subpart F	Test Procedures	Yes	

1065.5(a)(4)	Raw sampling (refers reader back to the specific emissions regulation for guidance)	Yes	
1048 subpart G	Compliance Provisions	Yes	
1048 subpart H	Reserved		
1048 subpart I	Definitions and Other Reference Information	Yes	
1048 appendix I and II	Yes		
1065 (all subparts)	Engine Testing Procedures	Yes	Except for the specific section below.
1065.715	Test Fuel Specifications for Natural Gas	No	
1068 (all subparts)	General Compliance Provisions for Nonroad Programs	Yes	Except for the specific sections below.
1068.245	Hardship Provisions for Unusual Circumstances	No	
1068.250	Hardship Provisions for Small-Volume Manufacturers	No	
1068.255	Hardship Provisions for Equipment Manufacturers and Secondary Engine Manufacturers	No	

**Indiana Department of Environmental Management
Office of Air Quality**

Attachment C

Title 40: Protection of Environment

**PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR
SOURCE CATEGORIES**

**Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary
Reciprocating Internal Combustion Engines**

Source: 69 FR 33506, June 15, 2004, unless otherwise noted.

What This Subpart Covers

§ 63.6580 What is the purpose of subpart ZZZZ?

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

[73 FR 3603, Jan. 18, 2008]

§ 63.6585 Am I subject to this subpart?

[Link to an amendment published at 78 FR 6700, January 30, 2013.](#)

You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

(a) A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

(b) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.

(c) An area source of HAP emissions is a source that is not a major source.

(d) If you are an owner or operator of an area source subject to this subpart, your status as an entity subject to a standard or other requirements under this subpart does not subject you to the obligation to obtain a permit under 40 CFR part 70 or 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable.

(e) If you are an owner or operator of a stationary RICE used for national security purposes, you may be eligible to request an exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3603, Jan. 18, 2008]

§ 63.6590 *What parts of my plant does this subpart cover?*

[Link to an amendment published at 78 FR 6700, January 30, 2013.](#)

This subpart applies to each affected source.

(a) *Affected source.* An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

(1) *Existing stationary RICE.*

(i) For stationary RICE with a site rating of more than 500 brake horsepower (HP) located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002.

(ii) For stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iv) A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.

(2) *New stationary RICE.* (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after December 19, 2002.

(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

(iii) A stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

(3) *Reconstructed stationary RICE.* (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in § 63.2 and reconstruction is commenced on or after December 19, 2002.

(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in § 63.2 and reconstruction is commenced on or after June 12, 2006.

(iii) A stationary RICE located at an area source of HAP emissions is reconstructed if you meet the definition of reconstruction in § 63.2 and reconstruction is commenced on or after June 12, 2006.

(b) *Stationary RICE subject to limited requirements.* (1) An affected source which meets either of the criteria in paragraphs (b)(1)(i) through (ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of § 63.6645(f).

(i) The stationary RICE is a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(ii) The stationary RICE is a new or reconstructed limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(2) A new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis must meet the initial notification requirements of § 63.6645(f) and the requirements of §§ 63.6625(c), 63.6650(g), and 63.6655(c). These stationary RICE do not have to meet the emission limitations and operating limitations of this subpart.

(3) The following stationary RICE do not have to meet the requirements of this subpart and of subpart A of this part, including initial notification requirements:

(i) Existing spark ignition 2 stroke lean burn (2SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(ii) Existing spark ignition 4 stroke lean burn (4SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(iii) Existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(iv) Existing limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(v) Existing stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;

(vi) Existing residential emergency stationary RICE located at an area source of HAP emissions;

(vii) Existing commercial emergency stationary RICE located at an area source of HAP emissions; or

(viii) Existing institutional emergency stationary RICE located at an area source of HAP emissions.

(c) *Stationary RICE subject to Regulations under 40 CFR Part 60.* An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

(1) A new or reconstructed stationary RICE located at an area source;

(2) A new or reconstructed 2SLB stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;

(3) A new or reconstructed 4SLB stationary RICE with a site rating of less than 250 brake HP located at a major source of HAP emissions;

(4) A new or reconstructed spark ignition 4 stroke rich burn (4SRB) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;

(5) A new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;

(6) A new or reconstructed emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;

(7) A new or reconstructed compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008; 75 FR 9674, Mar. 3, 2010; 75 FR 37733, June 30, 2010; 75 FR 51588, Aug. 20, 2010]

§ 63.6595 *When do I have to comply with this subpart?*

[Link to an amendment published at 78 FR 6701, January 30, 2013.](#)

(a) *Affected sources.* (1) If you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than October 19, 2013.

(2) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart no later than August 16, 2004.

(3) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions after August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(4) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.

(5) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(6) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.

(7) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(b) *Area sources that become major sources.* If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, the compliance dates in paragraphs (b)(1) and (2) of this section apply to you.

(1) Any stationary RICE for which construction or reconstruction is commenced after the date when your area source becomes a major source of HAP must be in compliance with this subpart upon startup of your affected source.

(2) Any stationary RICE for which construction or reconstruction is commenced before your area source becomes a major source of HAP must be in compliance with the provisions of this subpart that are applicable to RICE located at major sources within 3 years after your area source becomes a major source of HAP.

(c) If you own or operate an affected source, you must meet the applicable notification requirements in § 63.6645 and in 40 CFR part 63, subpart A.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008; 75 FR 9675, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010]

Emission and Operating Limitations

§ 63.6600 What emission limitations and operating limitations must I meet if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in § 63.6620 and Table 4 to this subpart.

(a) If you own or operate an existing, new, or reconstructed spark ignition 4SRB stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 1a to this subpart and the operating limitations in Table 1b to this subpart which apply to you.

(b) If you own or operate a new or reconstructed 2SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, a new or reconstructed 4SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, or a new or reconstructed CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

(c) If you own or operate any of the following stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the emission limitations in Tables 1a, 2a, 2c, and 2d to this subpart or operating limitations in Tables 1b and 2b to this subpart: an existing 2SLB stationary RICE; an existing 4SLB stationary RICE; a stationary RICE that combusts landfill

gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis; an emergency stationary RICE; or a limited use stationary RICE.

(d) If you own or operate an existing non-emergency stationary CI RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2c to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 9675, Mar. 3, 2010]

§ 63.6601 What emission limitations must I meet if I own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP and less than or equal to 500 brake HP located at a major source of HAP emissions?

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in § 63.6620 and Table 4 to this subpart. If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at major source of HAP emissions manufactured on or after January 1, 2008, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 9675, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010]

§ 63.6602 What emission limitations must I meet if I own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions?

[Link to an amendment published at 78 FR 6701, January 30, 2013.](#)

If you own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2c to this subpart which apply to you. Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in § 63.6620 and Table 4 to this subpart.

[75 FR 51589, Aug. 20, 2010]

§ 63.6603 What emission limitations and operating limitations must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?

[Link to an amendment published at 78 FR 6701, January 30, 2013.](#)

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in § 63.6620 and Table 4 to this subpart.

(a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 1b and Table 2b to this subpart that apply to you.

(b) If you own or operate an existing stationary non-emergency CI RICE greater than 300 HP located at area sources in areas of Alaska not accessible by the Federal Aid Highway System (FAHS) you do not have to meet the numerical CO emission limitations specified in Table 2d to this subpart. Existing stationary non-emergency CI RICE greater than 300 HP located at area sources in areas of Alaska not accessible by the FAHS must meet the management practices that are shown for stationary non-emergency CI RICE less than or equal to 300 HP in Table 2d to this subpart.

[75 FR 9675, Mar. 3, 2010, as amended at 75 FR 51589, Aug. 20, 2010; 76 FR 12866, Mar. 9, 2011]

§ 63.6604 What fuel requirements must I meet if I own or operate an existing stationary CI RICE?

[Link to an amendment published at 78 FR 6702, January 30, 2013.](#)

If you own or operate an existing non-emergency, non-black start CI stationary RICE with a site rating of more than 300 brake HP with a displacement of less than 30 liters per cylinder that uses diesel fuel, you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel. Existing non-emergency CI stationary RICE located in Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, or at area sources in areas of Alaska not accessible by the FAHS are exempt from the requirements of this section.

[75 FR 51589, Aug. 20, 2010]

General Compliance Requirements

§ 63.6605 What are my general requirements for complying with this subpart?

[Link to an amendment published at 78 FR 6702, January 30, 2013.](#)

(a) You must be in compliance with the emission limitations and operating limitations in this subpart that apply to you at all times.

(b) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[75 FR 9675, Mar. 3, 2010]

Testing and Initial Compliance Requirements

§ 63.6610 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?

If you own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions you are subject to the requirements of this section.

(a) You must conduct the initial performance test or other initial compliance demonstrations in Table 4 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in § 63.6595 and according to the provisions in § 63.7(a)(2).

(b) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must demonstrate initial compliance with either the proposed emission limitations or the promulgated emission limitations no later than February 10, 2005 or no later than 180 days after startup of the source, whichever is later, according to § 63.7(a)(2)(ix).

(c) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, and you chose to comply with the proposed emission limitations when demonstrating initial compliance, you must conduct a second performance test to demonstrate compliance with the promulgated emission limitations by December 13, 2007 or after startup of the source, whichever is later, according to § 63.7(a)(2)(ix).

(d) An owner or operator is not required to conduct an initial performance test on units for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (d)(1) through (5) of this section.

(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.

(2) The test must not be older than 2 years.

(3) The test must be reviewed and accepted by the Administrator.

(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

(5) The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3605, Jan. 18, 2008]

§ 63.6611 *By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a new or reconstructed 4SLB SI stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions?*

If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must conduct an initial performance test within 240 days after the compliance date that is specified for your stationary RICE in § 63.6595 and according to the provisions specified in Table 4 to this subpart, as appropriate.

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 51589, Aug. 20, 2010]

§ 63.6612 *By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source*

of HAP emissions or an existing stationary RICE located at an area source of HAP emissions?

If you own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions you are subject to the requirements of this section.

(a) You must conduct any initial performance test or other initial compliance demonstration according to Tables 4 and 5 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in § 63.6595 and according to the provisions in § 63.7(a)(2).

(b) An owner or operator is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (b)(1) through (4) of this section.

(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.

(2) The test must not be older than 2 years.

(3) The test must be reviewed and accepted by the Administrator.

(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

[75 FR 9676, Mar. 3, 2010, as amended at 75 FR 51589, Aug. 20, 2010]

§ 63.6615 When must I conduct subsequent performance tests?

If you must comply with the emission limitations and operating limitations, you must conduct subsequent performance tests as specified in Table 3 of this subpart.

§ 63.6620 What performance tests and other procedures must I use?

[Link to an amendment published at 78 FR 6702, January 30, 2013.](#)

(a) You must conduct each performance test in Tables 3 and 4 of this subpart that applies to you.

(b) Each performance test must be conducted according to the requirements that this subpart specifies in Table 4 to this subpart. If you own or operate a non-operational stationary RICE that is subject to performance testing, you do not need to start up the engine solely to conduct the performance test. Owners and operators of a non-operational engine can conduct the performance test when the engine is started up again.

(c) [Reserved]

(d) You must conduct three separate test runs for each performance test required in this section, as specified in § 63.7(e)(3). Each test run must last at least 1 hour.

(e)(1) You must use Equation 1 of this section to determine compliance with the percent reduction requirement:

$$\frac{C_i - C_o}{C_i} \times 100 = R \quad (\text{Eq. 1})$$

Where:

C_i = concentration of CO or formaldehyde at the control device inlet,

C_o = concentration of CO or formaldehyde at the control device outlet, and

R = percent reduction of CO or formaldehyde emissions.

(2) You must normalize the carbon monoxide (CO) or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO_2). If pollutant concentrations are to be corrected to 15 percent oxygen and CO_2 concentration is measured in lieu of oxygen concentration measurement, a CO_2 correction factor is needed. Calculate the CO_2 correction factor as described in paragraphs (e)(2)(i) through (iii) of this section.

(i) Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from Method 19, section 5.2, and the following equation:

$$F_o = \frac{0.209 F_d}{F_c} \quad (\text{Eq. 2})$$

Where:

F_o = Fuel factor based on the ratio of oxygen volume to the ultimate CO_2 volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is oxygen, percent/100.

F_d = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm^3/J ($\text{dscf}/10^6$ Btu).

F_c = Ratio of the volume of CO_2 produced to the gross calorific value of the fuel from Method 19, dsm^3/J ($\text{dscf}/10^6$ Btu).

(ii) Calculate the CO_2 correction factor for correcting measurement data to 15 percent oxygen, as follows:

$$X_{\text{co}_2} = \frac{5.9}{F_o} \quad (\text{Eq. 3})$$

Where:

X_{co_2} = CO_2 correction factor, percent.

5.9 = 20.9 percent O_2 - 15 percent O_2 , the defined O_2 correction value, percent.

(iii) Calculate the NO_x and SO_2 gas concentrations adjusted to 15 percent O_2 using CO_2 as follows:

$$C_{adj} = C_d \frac{X_{CO_2}}{\%CO_2} \quad (\text{Eq. 4})$$

Where:

$\%CO_2$ = Measured CO_2 concentration measured, dry basis, percent.

(f) If you comply with the emission limitation to reduce CO and you are not using an oxidation catalyst, if you comply with the emission limitation to reduce formaldehyde and you are not using NSCR, or if you comply with the emission limitation to limit the concentration of formaldehyde in the stationary RICE exhaust and you are not using an oxidation catalyst or NSCR, you must petition the Administrator for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. You must not conduct the initial performance test until after the petition has been approved by the Administrator.

(g) If you petition the Administrator for approval of operating limitations, your petition must include the information described in paragraphs (g)(1) through (5) of this section.

(1) Identification of the specific parameters you propose to use as operating limitations;

(2) A discussion of the relationship between these parameters and HAP emissions, identifying how HAP emissions change with changes in these parameters, and how limitations on these parameters will serve to limit HAP emissions;

(3) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;

(4) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

(5) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

(h) If you petition the Administrator for approval of no operating limitations, your petition must include the information described in paragraphs (h)(1) through (7) of this section.

(1) Identification of the parameters associated with operation of the stationary RICE and any emission control device which could change intentionally (e.g., operator adjustment, automatic controller adjustment, etc.) or unintentionally (e.g., wear and tear, error, etc.) on a routine basis or over time;

(2) A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions;

(3) For the parameters which could change in such a way as to increase HAP emissions, a discussion of whether establishing limitations on the parameters would serve to limit HAP emissions;

(4) For the parameters which could change in such a way as to increase HAP emissions, a discussion of how you could establish upper and/or lower values for the parameters which would establish limits on the parameters in operating limitations;

(5) For the parameters, a discussion identifying the methods you could use to measure them and the instruments you could use to monitor them, as well as the relative accuracy and precision of the methods and instruments;

(6) For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments you could use to monitor them; and

(7) A discussion of why, from your point of view, it is infeasible or unreasonable to adopt the parameters as operating limitations.

(i) The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9676, Mar. 3, 2010]

§ 63.6625 *What are my monitoring, installation, collection, operation, and maintenance requirements?*

[Link to an amendment published at 78 FR 6703, January 30, 2013.](#)

(a) If you elect to install a CEMS as specified in Table 5 of this subpart, you must install, operate, and maintain a CEMS to monitor CO and either oxygen or CO₂ at both the inlet and the outlet of the control device according to the requirements in paragraphs (a)(1) through (4) of this section.

(1) Each CEMS must be installed, operated, and maintained according to the applicable performance specifications of 40 CFR part 60, appendix B.

(2) You must conduct an initial performance evaluation and an annual relative accuracy test audit (RATA) of each CEMS according to the requirements in § 63.8 and according to the applicable performance specifications of 40 CFR part 60, appendix B as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.

(3) As specified in § 63.8(c)(4)(ii), each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. You must have at least two data points, with each representing a different 15-minute period, to have a valid hour of data.

(4) The CEMS data must be reduced as specified in § 63.8(g)(2) and recorded in parts per million or parts per billion (as appropriate for the applicable limitation) at 15 percent oxygen or the equivalent CO₂ concentration.

(b) If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of this subpart, you must install, operate, and maintain each CPMS according to the requirements in paragraphs (b)(1) through (5) of this section. For an affected source that is complying with the emission

limitations and operating limitations on March 9, 2011, the requirements in paragraph (b) of this section are applicable September 6, 2011.

(1) You must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in paragraphs (b)(1)(i) through (v) of this section and in § 63.8(d). As specified in § 63.8(f)(4), you may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in paragraphs (b)(1) through (5) of this section in your site-specific monitoring plan.

(i) The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;

(ii) Sampling interface (e.g., thermocouple) location such that the monitoring system will provide representative measurements;

(iii) Equipment performance evaluations, system accuracy audits, or other audit procedures;

(iv) Ongoing operation and maintenance procedures in accordance with provisions in § 63.8(c)(1) and (c)(3); and

(v) Ongoing reporting and recordkeeping procedures in accordance with provisions in § 63.10(c), (e)(1), and (e)(2)(i).

(2) You must install, operate, and maintain each CPMS in continuous operation according to the procedures in your site-specific monitoring plan.

(3) The CPMS must collect data at least once every 15 minutes (see also § 63.6635).

(4) For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.

(5) You must conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in your site-specific monitoring plan at least annually.

(6) You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must monitor and record your fuel usage daily with separate fuel meters to measure the volumetric flow rate of each fuel. In addition, you must operate your stationary RICE in a manner which reasonably minimizes HAP emissions.

(d) If you are operating a new or reconstructed emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must install a non-resettable hour meter prior to the startup of the engine.

(e) If you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

- (1) An existing stationary RICE with a site rating of less than 100 HP located at a major source of HAP emissions;
 - (2) An existing emergency or black start stationary RICE with a site rating of less than or equal to 500 HP located at a major source of HAP emissions;
 - (3) An existing emergency or black start stationary RICE located at an area source of HAP emissions;
 - (4) An existing non-emergency, non-black start stationary CI RICE with a site rating less than or equal to 300 HP located at an area source of HAP emissions;
 - (5) An existing non-emergency, non-black start 2SLB stationary RICE located at an area source of HAP emissions;
 - (6) An existing non-emergency, non-black start landfill or digester gas stationary RICE located at an area source of HAP emissions;
 - (7) An existing non-emergency, non-black start 4SLB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions;
 - (8) An existing non-emergency, non-black start 4SRB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions;
 - (9) An existing, non-emergency, non-black start 4SLB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calendar year; and
 - (10) An existing, non-emergency, non-black start 4SRB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calendar year.
- (f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.
- (g) If you own or operate an existing non-emergency, non-black start CI engine greater than or equal to 300 HP that is not equipped with a closed crankcase ventilation system, you must comply with either paragraph (g)(1) or paragraph (g)(2) of this section. Owners and operators must follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters, or can request the Administrator to approve different maintenance requirements that are as protective as manufacturer requirements. Existing CI engines located at area sources in areas of Alaska not accessible by the FAHS do not have to meet the requirements of paragraph (g) of this section.
- (1) Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or
 - (2) Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates, and metals.
- (h) If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.

(i) If you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to this subpart or in items 1 or 4 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

(j) If you own or operate a stationary SI engine that is subject to the work, operation or management practices in items 6, 7, or 8 of Table 2c to this subpart or in items 5, 6, 7, 9, or 11 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010; 76 FR 12866, Mar. 9, 2011]

§ 63.6630 How do I demonstrate initial compliance with the emission limitations and operating limitations?

[Link to an amendment published at 78 FR 6704, January 30, 2013.](#)

(a) You must demonstrate initial compliance with each emission and operating limitation that applies to you according to Table 5 of this subpart.

(b) During the initial performance test, you must establish each operating limitation in Tables 1b and 2b of this subpart that applies to you.

(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in § 63.6645.

Continuous Compliance Requirements

§ 63.6635 How do I monitor and collect data to demonstrate continuous compliance?

(a) If you must comply with emission and operating limitations, you must monitor and collect data according to this section.

(b) Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, you must monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(c) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods.

[69 FR 33506, June 15, 2004, as amended at 76 FR 12867, Mar. 9, 2011]

§ 63.6640 How do I demonstrate continuous compliance with the emission limitations and operating limitations?

[Link to an amendment published at 78 FR 6704, January 30, 2013.](#)

(a) You must demonstrate continuous compliance with each emission limitation and operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.

(b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in § 63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

(c) [Reserved]

(d) For new, reconstructed, and rebuilt stationary RICE, deviations from the emission or operating limitations that occur during the first 200 hours of operation from engine startup (engine burn-in period) are not violations. Rebuilt stationary RICE means a stationary RICE that has been rebuilt as that term is defined in 40 CFR 94.11(a).

(e) You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary

RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

(f) *Requirements for emergency stationary RICE.* (1) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that was installed on or after June 12, 2006, or an existing emergency stationary RICE located at an area source of HAP emissions, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1)(i) through (iii) of this section. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1)(i) through (iii) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1)(i) through (iii) of this section, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines.

(i) There is no time limit on the use of emergency stationary RICE in emergency situations.

(ii) You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year.

(iii) You may operate your emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph (f)(1)(iii), as long as the power provided by the financial arrangement is limited to emergency power.

(2) If you own or operate an emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that was installed prior to June 12, 2006, you must operate the engine according to the conditions described in paragraphs (f)(2)(i) through (iii) of this section. If you do not operate the engine according to the requirements in paragraphs (f)(2)(i) through (iii) of this section, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines.

(i) There is no time limit on the use of emergency stationary RICE in emergency situations.

(ii) You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the manufacturer, the vendor, or the insurance company associated with the engine. Required testing of such units should be minimized, but there is no time limit on the use of emergency stationary RICE in emergency situations and for routine testing and maintenance.

(iii) You may operate your emergency stationary RICE for an additional 50 hours per year in non-emergency situations. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51591, Aug. 20, 2010]

Notifications, Reports, and Records

§ 63.6645 *What notifications must I submit and when?*

[Link to an amendment published at 78 FR 6705, January 30, 2013.](#)

(a) You must submit all of the notifications in §§ 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;

(1) An existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

(2) An existing stationary RICE located at an area source of HAP emissions.

(3) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(4) A new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 HP located at a major source of HAP emissions.

(5) This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.

(b) As specified in § 63.9(b)(2), if you start up your stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart, you must submit an Initial Notification not later than December 13, 2004.

(c) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions on or after August 16, 2004, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(d) As specified in § 63.9(b)(2), if you start up your stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart and you are required to submit an initial notification, you must submit an Initial Notification not later than July 16, 2008.

(e) If you start up your new or reconstructed stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions on or after March 18, 2008 and you are required to submit an initial notification, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(f) If you are required to submit an Initial Notification but are otherwise not affected by the requirements of this subpart, in accordance with § 63.6590(b), your notification should include the information in § 63.9(b)(2)(i) through (v), and a statement that your stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions).

(g) If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in § 63.7(b)(1).

(h) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, you must submit a Notification of Compliance Status according to § 63.9(h)(2)(ii).

(1) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.

(2) For each initial compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to § 63.10(d)(2).

[73 FR 3606, Jan. 18, 2008, as amended at 75 FR 9677, Mar. 3, 2010; 75 FR 51591, Aug. 20, 2010]

§ 63.6650 *What reports must I submit and when?*

[Link to an amendment published at 78 FR 6705, January 30, 2013.](#)

(a) You must submit each report in Table 7 of this subpart that applies to you.

(b) Unless the Administrator has approved a different schedule for submission of reports under § 63.10(a), you must submit each report by the date in Table 7 of this subpart and according to the requirements in paragraphs (b)(1) through (b)(9) of this section.

(1) For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in § 63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in § 63.6595.

(2) For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in § 63.6595.

(3) For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6 (a)(3)(iii)(A), you may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (b)(4) of this section.

(6) For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in § 63.6595 and ending on December 31.

(7) For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in § 63.6595.

(8) For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.

(9) For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

(c) The Compliance report must contain the information in paragraphs (c)(1) through (6) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with § 63.6605(b), including actions taken to correct a malfunction.

(5) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

(6) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in § 63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.

(d) For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in this subpart, the Compliance report must contain the information in paragraphs (c)(1) through (4) of this section and the information in paragraphs (d)(1) and (2) of this section.

(1) The total operating time of the stationary RICE at which the deviation occurred during the reporting period.

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(e) For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in this subpart, you must include information in paragraphs (c)(1) through (4) and (e)(1) through (12) of this section.

(1) The date and time that each malfunction started and stopped.

(2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out-of-control, including the information in § 63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.

(5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.

(8) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.

(9) A brief description of the stationary RICE.

(10) A brief description of the CMS.

(11) The date of the latest CMS certification or audit.

(12) A description of any changes in CMS, processes, or controls since the last reporting period.

(f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

(g) If you are operating as a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must submit an annual

report according to Table 7 of this subpart by the date specified unless the Administrator has approved a different schedule, according to the information described in paragraphs (b)(1) through (b)(5) of this section. You must report the data specified in (g)(1) through (g)(3) of this section.

(1) Fuel flow rate of each fuel and the heating values that were used in your calculations. You must also demonstrate that the percentage of heat input provided by landfill gas or digester gas is equivalent to 10 percent or more of the total fuel consumption on an annual basis.

(2) The operating limits provided in your federally enforceable permit, and any deviations from these limits.

(3) Any problems or errors suspected with the meters.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9677, Mar. 3, 2010]

§ 63.6655 *What records must I keep?*

[Link to an amendment published at 78 FR 6706, January 30, 2013.](#)

(a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) and (c) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in § 63.10(b)(2)(xiv).

(2) Records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment.

(3) Records of performance tests and performance evaluations as required in § 63.10(b)(2)(viii).

(4) Records of all required maintenance performed on the air pollution control and monitoring equipment.

(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with § 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

(b) For each CEMS or CPMS, you must keep the records listed in paragraphs (b)(1) through (3) of this section.

(1) Records described in § 63.10(b)(2)(vi) through (xi).

(2) Previous (*i.e.*, superseded) versions of the performance evaluation plan as required in § 63.8(d)(3).

(3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in § 63.8(f)(6)(i), if applicable.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must keep the records of your daily fuel usage monitors.

(d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.

(e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE;

(1) An existing stationary RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions.

(2) An existing stationary emergency RICE.

(3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.

(f) If you own or operate any of the stationary RICE in paragraphs (f)(1) or (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.

(1) An existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions that does not meet the standards applicable to non-emergency engines.

(2) An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9678, Mar. 3, 2010; 75 FR 51592, Aug. 20, 2010]

§ 63.6660 *In what form and how long must I keep my records?*

(a) Your records must be in a form suitable and readily available for expeditious review according to § 63.10(b)(1).

(b) As specified in § 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to § 63.10(b)(1).

[69 FR 33506, June 15, 2004, as amended at 75 FR 9678, Mar. 3, 2010]

Other Requirements and Information

§ 63.6665 *What parts of the General Provisions apply to me?*

Table 8 to this subpart shows which parts of the General Provisions in §§ 63.1 through 63.15 apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal

to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing stationary RICE that combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions specified in Table 8 except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE.

[75 FR 9678, Mar. 3, 2010]

§ 63.6670 Who implements and enforces this subpart?

(a) This subpart is implemented and enforced by the U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as the U.S. EPA) has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out whether this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are:

(1) Approval of alternatives to the non-opacity emission limitations and operating limitations in § 63.6600 under § 63.6(g).

(2) Approval of major alternatives to test methods under § 63.7(e)(2)(ii) and (f) and as defined in § 63.90.

(3) Approval of major alternatives to monitoring under § 63.8(f) and as defined in § 63.90.

(4) Approval of major alternatives to recordkeeping and reporting under § 63.10(f) and as defined in § 63.90.

(5) Approval of a performance test which was conducted prior to the effective date of the rule, as specified in § 63.6610(b).

§ 63.6675 What definitions apply to this subpart?

[Link to an amendment published at 78 FR 6706, January 30, 2013.](#)

Terms used in this subpart are defined in the Clean Air Act (CAA); in 40 CFR 63.2, the General Provisions of this part; and in this section as follows:

Area source means any stationary source of HAP that is not a major source as defined in part 63.

Associated equipment as used in this subpart and as referred to in section 112(n)(4) of the CAA, means equipment associated with an oil or natural gas exploration or production well, and includes all equipment from the well bore to the point of custody transfer, except glycol dehydration units, storage vessels with potential for flash emissions, combustion turbines, and stationary RICE.

Black start engine means an engine whose only purpose is to start up a combustion turbine.

CAA means the Clean Air Act (42 U.S.C. 7401 *et seq.*, as amended by Public Law 101-549, 104 Stat. 2399).

Commercial emergency stationary RICE means an emergency stationary RICE used in commercial establishments such as office buildings, hotels, stores, telecommunications facilities, restaurants, financial institutions such as banks, doctor's offices, and sports and performing arts facilities.

Compression ignition means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

Custody transfer means the transfer of hydrocarbon liquids or natural gas: After processing and/or treatment in the producing operations, or from storage vessels or automatic transfer facilities or other such equipment, including product loading racks, to pipelines or any other forms of transportation. For the purposes of this subpart, the point at which such liquids or natural gas enters a natural gas processing plant is a point of custody transfer.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

- (1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation or operating limitation;
- (2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or
- (3) Fails to meet any emission limitation or operating limitation in this subpart during malfunction, regardless of whether or not such failure is permitted by this subpart.
- (4) Fails to satisfy the general duty to minimize emissions established by § 63.6(e)(1)(i).

Diesel engine means any stationary RICE in which a high boiling point liquid fuel injected into the combustion chamber ignites when the air charge has been compressed to a temperature sufficiently high for auto-ignition. This process is also known as compression ignition.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is fuel oil number 2. Diesel fuel also includes any non-distillate fuel with comparable physical and chemical properties (e.g. biodiesel) that is suitable for use in compression ignition engines.

Digester gas means any gaseous by-product of wastewater treatment typically formed through the anaerobic decomposition of organic waste materials and composed principally of methane and CO₂.

Dual-fuel engine means any stationary RICE in which a liquid fuel (typically diesel fuel) is used for compression ignition and gaseous fuel (typically natural gas) is used as the primary fuel.

Emergency stationary RICE means any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, *etc.* Stationary RICE used for peak shaving are not considered emergency stationary RICE. Stationary RICE used to supply power to an electric grid or that supply non-emergency power as part of a financial arrangement with another entity are not considered to be emergency engines, except as permitted under § 63.6640(f). All emergency stationary RICE must comply with the requirements specified in § 63.6640(f) in order to be considered emergency stationary RICE. If the engine does not comply with the requirements specified in § 63.6640(f), then it is not considered to be an emergency stationary RICE under this subpart.

Engine startup means the time from initial start until applied load and engine and associated equipment reaches steady state or normal operation. For stationary engine with catalytic controls, engine startup means the time from initial start until applied load and engine and associated equipment, including the catalyst, reaches steady state or normal operation.

Four-stroke engine means any type of engine which completes the power cycle in two crankshaft revolutions, with intake and compression strokes in the first revolution and power and exhaust strokes in the second revolution.

Gaseous fuel means a material used for combustion which is in the gaseous state at standard atmospheric temperature and pressure conditions.

Gasoline means any fuel sold in any State for use in motor vehicles and motor vehicle engines, or nonroad or stationary engines, and commonly or commercially known or sold as gasoline.

Glycol dehydration unit means a device in which a liquid glycol (including, but not limited to, ethylene glycol, diethylene glycol, or triethylene glycol) absorbent directly contacts a natural gas stream and absorbs water in a contact tower or absorption column (absorber). The glycol contacts and absorbs water vapor and other gas stream constituents from the natural gas and becomes "rich" glycol. This glycol is then regenerated in the glycol dehydration unit reboiler. The "lean" glycol is then recycled.

Hazardous air pollutants (HAP) means any air pollutants listed in or pursuant to section 112(b) of the CAA.

Institutional emergency stationary RICE means an emergency stationary RICE used in institutional establishments such as medical centers, nursing homes, research centers, institutions of higher education, correctional facilities, elementary and secondary schools, libraries, religious establishments, police stations, and fire stations.

ISO standard day conditions means 288 degrees Kelvin (15 degrees Celsius), 60 percent relative humidity and 101.3 kilopascals pressure.

Landfill gas means a gaseous by-product of the land application of municipal refuse typically formed through the anaerobic decomposition of waste materials and composed principally of methane and CO₂.

Lean burn engine means any two-stroke or four-stroke spark ignited engine that does not meet the definition of a rich burn engine.

Limited use stationary RICE means any stationary RICE that operates less than 100 hours per year.

Liquefied petroleum gas means any liquefied hydrocarbon gas obtained as a by-product in petroleum refining of natural gas production.

Liquid fuel means any fuel in liquid form at standard temperature and pressure, including but not limited to diesel, residual/crude oil, kerosene/naphtha (jet fuel), and gasoline.

Major Source, as used in this subpart, shall have the same meaning as in § 63.2, except that:

(1) Emissions from any oil or gas exploration or production well (with its associated equipment (as defined in this section)) and emissions from any pipeline compressor station or pump station shall not be aggregated with emissions from other similar units, to determine whether such emission points or stations are major sources, even when emission points are in a contiguous area or under common control;

(2) For oil and gas production facilities, emissions from processes, operations, or equipment that are not part of the same oil and gas production facility, as defined in § 63.1271 of subpart HHH of this part, shall not be aggregated;

(3) For production field facilities, only HAP emissions from glycol dehydration units, storage vessel with the potential for flash emissions, combustion turbines and reciprocating internal combustion engines shall be aggregated for a major source determination; and

(4) Emissions from processes, operations, and equipment that are not part of the same natural gas transmission and storage facility, as defined in § 63.1271 of subpart HHH of this part, shall not be aggregated.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Natural gas means a naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in geologic formations beneath the Earth's surface, of which the principal constituent is methane. Natural gas may be field or pipeline quality.

Non-selective catalytic reduction (NSCR) means an add-on catalytic nitrogen oxides (NO_x) control device for rich burn engines that, in a two-step reaction, promotes the conversion of excess oxygen, NO_x, CO, and volatile organic compounds (VOC) into CO₂, nitrogen, and water.

Oil and gas production facility as used in this subpart means any grouping of equipment where hydrocarbon liquids are processed, upgraded (i.e., remove impurities or other constituents to meet contract specifications), or stored prior to the point of custody transfer; or where natural gas is processed, upgraded, or stored prior to entering the natural gas transmission and storage source category. For purposes of a major source determination, facility (including a building, structure, or installation) means oil and natural gas production and processing equipment that is located within the boundaries of an individual surface site as defined in this section. Equipment that is part of a facility will typically be located within close proximity to other equipment located at the same facility. Pieces of production equipment or groupings of equipment located on different oil and gas leases, mineral fee tracts, lease tracts, subsurface or surface unit areas, surface fee tracts, surface lease tracts, or separate surface sites, whether or not connected by a road, waterway, power line or pipeline, shall not be considered part of the same facility. Examples of facilities in the oil and natural gas production source category include, but are not limited to, well sites, satellite tank batteries, central tank batteries, a compressor station that transports natural gas to a natural gas processing plant, and natural gas processing plants.

Oxidation catalyst means an add-on catalytic control device that controls CO and VOC by oxidation.

Peaking unit or engine means any standby engine intended for use during periods of high demand that are not emergencies.

Percent load means the fractional power of an engine compared to its maximum manufacturer's design capacity at engine site conditions. Percent load may range between 0 percent to above 100 percent.

Potential to emit means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. For oil and natural gas production facilities subject to subpart HH of this part, the potential to emit provisions in § 63.760(a) may be used. For natural gas transmission and storage facilities subject to subpart HHH of this part, the maximum annual facility gas throughput for storage facilities may be determined according to § 63.1270(a)(1) and the maximum annual throughput for transmission facilities may be determined according to § 63.1270(a)(2).

Production field facility means those oil and gas production facilities located prior to the point of custody transfer.

Production well means any hole drilled in the earth from which crude oil, condensate, or field natural gas is extracted.

Propane means a colorless gas derived from petroleum and natural gas, with the molecular structure C_3H_8 .

Residential emergency stationary RICE means an emergency stationary RICE used in residential establishments such as homes or apartment buildings.

Responsible official means responsible official as defined in 40 CFR 70.2.

Rich burn engine means any four-stroke spark ignited engine where the manufacturer's recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio at full load conditions is less than or equal to 1.1. Engines originally manufactured as rich burn engines, but modified prior to December 19, 2002 with passive emission control technology for NO_x (such as pre-combustion chambers) will be considered lean burn engines. Also, existing engines where there are no manufacturer's recommendations regarding air/fuel ratio will be considered a rich burn engine if the excess oxygen content of the exhaust at full load conditions is less than or equal to 2 percent.

Site-rated HP means the maximum manufacturer's design capacity at engine site conditions.

Spark ignition means relating to either: A gasoline-fueled engine; or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for CI and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

Stationary reciprocating internal combustion engine (RICE) means any reciprocating internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as

defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

Stationary RICE test cell/stand means an engine test cell/stand, as defined in subpart P of this part, that tests stationary RICE.

Stoichiometric means the theoretical air-to-fuel ratio required for complete combustion.

Storage vessel with the potential for flash emissions means any storage vessel that contains a hydrocarbon liquid with a stock tank gas-to-oil ratio equal to or greater than 0.31 cubic meters per liter and an American Petroleum Institute gravity equal to or greater than 40 degrees and an actual annual average hydrocarbon liquid throughput equal to or greater than 79,500 liters per day. Flash emissions occur when dissolved hydrocarbons in the fluid evolve from solution when the fluid pressure is reduced.

Subpart means 40 CFR part 63, subpart ZZZZ.

Surface site means any combination of one or more graded pad sites, gravel pad sites, foundations, platforms, or the immediate physical location upon which equipment is physically affixed.

Two-stroke engine means a type of engine which completes the power cycle in single crankshaft revolution by combining the intake and compression operations into one stroke and the power and exhaust operations into a second stroke. This system requires auxiliary scavenging and inherently runs lean of stoichiometric.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3607, Jan. 18, 2008; 75 FR 9679, Mar. 3, 2010; 75 FR 51592, Aug. 20, 2010; 76 FR 12867, Mar. 9, 2011]

Table 1 a to Subpart ZZZZ of Part 63—Emission Limitations for Existing, New, and Reconstructed Spark Ignition, 4SRB Stationary RICE > 500 HP Located at a Major Source of HAP Emissions

As stated in §§ 63.6600 and 63.6640, you must comply with the following emission limitations at 100 percent load plus or minus 10 percent for existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions:

For each . . .	You must meet the following emission limitation, except during periods of startup . . .	During periods of startup you must . . .
1. 4SRB stationary RICE	a. Reduce formaldehyde emissions by 76 percent or more. If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may reduce formaldehyde emissions by 75 percent or more until June 15, 2007 or	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. ¹
	b. Limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O ₂	

¹Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[75 FR 9679, Mar. 3, 2010, as amended at 75 FR 51592, Aug. 20, 2010]

Table 1 b to Subpart ZZZZ of Part 63—Operating Limitations for Existing, New, and Reconstructed Spark Ignition 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions and Existing Spark Ignition 4SRB Stationary RICE >500 HP Located at an Area Source of HAP Emissions

[Link to an amendment published at 78 FR 6706, January 30, 2013.](#)

As stated in §§ 63.6600, 63.6603, 63.6630 and 63.6640, you must comply with the following operating limitations for existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions and existing 4SRB stationary RICE >500 HP located at an area source of HAP emissions that operate more than 24 hours per calendar year:

For each . . .	You must meet the following operating limitation . . .
1. 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and using NSCR; or 4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O ₂ and using NSCR; or 4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 2.7 ppmvd or less at 15 percent O ₂ and using NSCR.	a. Maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst measured during the initial performance test; and b. Maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 750 °F and less than or equal to 1250 °F.
2. 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and not using NSCR; or 4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O ₂ and not using NSCR; or 4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 2.7 ppmvd or less at 15 percent O ₂ and not using NSCR.	Comply with any operating limitations approved by the Administrator.

[76 FR 12867, Mar. 9, 2011]

Table 2 a to Subpart ZZZZ of Part 63—Emission Limitations for New and Reconstructed 2SLB and Compression Ignition Stationary RICE >500 HP and New

and Reconstructed 4SLB Stationary RICE ≥ 250 HP Located at a Major Source of HAP Emissions

As stated in §§ 63.6600 and 63.6640, you must comply with the following emission limitations for new and reconstructed lean burn and new and reconstructed compression ignition stationary RICE at 100 percent load plus or minus 10 percent:

For each . . .	You must meet the following emission limitation, except during periods of startup . . .	During periods of startup you must . . .
1. 2SLB stationary RICE	a. Reduce CO emissions by 58 percent or more; or b. Limit concentration of formaldehyde in the stationary RICE exhaust to 12 ppmvd or less at 15 percent O ₂ . If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may limit concentration of formaldehyde to 17 ppmvd or less at 15 percent O ₂ until June 15, 2007	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. ¹
2. 4SLB stationary RICE	a. Reduce CO emissions by 93 percent or more; or	
	b. Limit concentration of formaldehyde in the stationary RICE exhaust to 14 ppmvd or less at 15 percent O ₂	
3. CI stationary RICE	a. Reduce CO emissions by 70 percent or more; or	
	b. Limit concentration of formaldehyde in the stationary RICE exhaust to 580 ppbvd or less at 15 percent O ₂	

¹ Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[75 FR 9680, Mar. 3, 2010]

Table 2 b to Subpart ZZZZ of Part 63— Operating Limitations for New and Reconstructed 2SLB and Compression Ignition Stationary RICE >500 HP Located at a Major Source of HAP Emissions, New and Reconstructed 4SLB Stationary RICE ≥ 250 HP Located at a Major Source of HAP Emissions, Existing Compression Ignition Stationary RICE >500 HP, and Existing 4SLB Stationary RICE >500 HP Located at an Area Source of HAP Emissions

[Link to an amendment published at 78 FR 6707, January 30, 2013.](#)

As stated in §§ 63.6600, 63.6601, 63.6603, 63.6630, and 63.6640, you must comply with the following operating limitations for new and reconstructed 2SLB and compression ignition stationary RICE located at a major source of HAP emissions; new and reconstructed 4SLB stationary RICE ≥ 250 HP located at a major source of HAP emissions; existing compression ignition stationary RICE >500 HP; and existing

4SLB stationary RICE >500 HP located at an area source of HAP emissions that operate more than 24 hours per calendar year:

For each . . .	You must meet the following operating limitation . . .
1. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and using an oxidation catalyst; or 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of CO in the stationary RICE exhaust and using an oxidation catalyst	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F. ¹
2. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and not using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and not using an oxidation catalyst; or 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of CO in the stationary RICE exhaust and not using an oxidation catalyst	Comply with any operating limitations approved by the Administrator.

¹ Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(g) for a different temperature range.

[75 FR 51593, Aug. 20, 2010, as amended at 76 FR 12867, Mar. 9, 2011]

Table 2 c to Subpart ZZZZ of Part 63—Requirements for Existing Compression Ignition Stationary RICE Located at a Major Source of HAP Emissions and Existing Spark Ignition Stationary RICE ≤ 500 HP Located at a Major Source of HAP Emissions

[Link to an amendment published at 78 FR 6708, January 30, 2013.](#)

[Link to a correction published at 78 FR 14457, March 6, 2013.](#)

As stated in §§ 63.6600, 63.6602, and 63.6640, you must comply with the following requirements for existing compression ignition stationary RICE located at a major source of HAP emissions and existing spark ignition stationary RICE ≤ 500 HP located at a major source of HAP emissions:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
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1. Emergency stationary CI RICE and black start stationary CI RICE. ¹	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; ² b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. ³	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. ³
2. Non-Emergency, non-black start stationary CI RICE < 100 HP	a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first; ²	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. ³	
3. Non-Emergency, non-black start CI stationary RICE $100 \leq \text{HP} \leq 300$ HP	Limit concentration of CO in the stationary RICE exhaust to 230 ppmvd or less at 15 percent O ₂	
4. Non-Emergency, non-black start CI stationary RICE $300 < \text{HP} \leq 500$	a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd or less at 15 percent O ₂ ; or	
	b. Reduce CO emissions by 70 percent or more.	
5. Non-Emergency, non-black start stationary CI RICE >500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd or less at 15 percent O ₂ ; or	
	b. Reduce CO emissions by 70 percent or more.	
6. Emergency stationary SI RICE and black start stationary SI RICE. ¹	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; ²	
	b. Inspect spark plugs every 1,000 hours of operation or	

	annually, whichever comes first;	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. ³	
7. Non-Emergency, non-black start stationary SI RICE < 100 HP that are not 2SLB stationary RICE	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; ²	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first;	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary. ³	
8. Non-Emergency, non-black start 2SLB stationary SI RICE < 100 HP	a. Change oil and filter every 4,320 hours of operation or annually, whichever comes first; ²	
	b. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first;	
	c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary. ³	
9. Non-emergency, non-black start 2SLB stationary RICE $100 \leq \text{HP} \leq 500$	Limit concentration of CO in the stationary RICE exhaust to 225 ppmvd or less at 15 percent O ₂	
10. Non-emergency, non-black start 4SLB stationary RICE $100 \leq \text{HP} \leq 500$	Limit concentration of CO in the stationary RICE exhaust to 47 ppmvd or less at 15 percent O ₂	
11. Non-emergency, non-black start 4SRB stationary RICE $100 \leq \text{HP} \leq 500$	Limit concentration of formaldehyde in the stationary RICE exhaust to 10.3 ppmvd or less at 15 percent O ₂	
12. Non-emergency, non-black start landfill or digester gas-fired stationary	Limit concentration of CO in the stationary RICE exhaust to 177 ppmvd or less at 15	

RICE $100 \leq \text{HP} \leq 500$	percent O ₂	
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¹ If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Table 2c of this subpart, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

² Sources have the option to utilize an oil analysis program as described in § 63.6625(i) in order to extend the specified oil change requirement in Table 2c of this subpart.

³ Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[75 FR 51593, Aug. 20, 2010]

Table 2 d to Subpart ZZZZ of Part 63—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

[Link to an amendment published at 78 FR 6709, January 30, 2013.](#)

As stated in §§ 63.6603 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
1. Non-Emergency, non-black start CI stationary RICE ≤ 300 HP	a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first; ¹	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	

2. Non-Emergency, non-black start CI stationary RICE 300 <HP≤ 500	a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd at 15 percent O ₂ ; or	
	b. Reduce CO emissions by 70 percent or more.	
3. Non-Emergency, non-black start CI stationary RICE > 500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent O ₂ ; or	
	b. Reduce CO emissions by 70 percent or more.	
4. Emergency stationary CI RICE and black start stationary CI RICE. ²	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; ¹	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	
5. Emergency stationary SI RICE; black start stationary SI RICE; non-emergency, non-black start 4SLB stationary RICE > 500 HP that operate 24 hours or less per calendar year; non-emergency, non-black start 4SRB stationary RICE > 500 HP that operate 24 hours or less per calendar year. ²	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; ¹ b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first; and c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	
6. Non-emergency, non-black start 2SLB stationary RICE	a. Change oil and filter every 4,320 hours of operation or annually, whichever comes first; ¹	
	b. Inspect spark plugs	

	every 4,320 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary.	
7. Non-emergency, non-black start 4SLB stationary RICE \leq 500 HP	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; ¹	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	
8. Non-emergency, non-black start 4SLB stationary RICE > 500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 47 ppmvd at 15 percent O ₂ ; or	
	b. Reduce CO emissions by 93 percent or more.	
9. Non-emergency, non-black start 4SRB stationary RICE \leq 500 HP	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; ¹	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	
10. Non-emergency, non-black start 4SRB	a. Limit concentration of	

stationary RICE > 500 HP	formaldehyde in the stationary RICE exhaust to 2.7 ppmvd at 15 percent O ₂ ; or	
	b. Reduce formaldehyde emissions by 76 percent or more.	
11. Non-emergency, non-black start landfill or digester gas-fired stationary RICE	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; ¹	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	

¹ Sources have the option to utilize an oil analysis program as described in § 63.6625(i) in order to extend the specified oil change requirement in Table 2d of this subpart.

² If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

[75 FR 51595, Aug. 20, 2010]

Table 3 to Subpart ZZZZ of Part 63—Subsequent Performance Tests

[Link to an amendment published at 78 FR 6711, January 30, 2013.](#)

As stated in §§ 63.6615 and 63.6620, you must comply with the following subsequent performance test requirements:

For each . . .	Complying with the requirement to . . .	You must . . .
1. New or reconstructed 2SLB stationary RICE with a brake horsepower > 500 located at major sources; new or	Reduce CO emissions and not	Conduct subsequent performance tests

reconstructed 4SLB stationary RICE with a brake horsepower ≥ 250 located at major sources; and new or reconstructed CI stationary RICE with a brake horsepower > 500 located at major sources	using a CEMS	semiannually. ¹
2. 4SRB stationary RICE with a brake horsepower $\geq 5,000$ located at major sources	Reduce formaldehyde emissions	Conduct subsequent performance tests semiannually. ¹
3. Stationary RICE with a brake horsepower > 500 located at major sources and new or reconstructed 4SLB stationary RICE with a brake horsepower $250 \leq \text{HP} \leq 500$ located at major sources	Limit the concentration of formaldehyde in the stationary RICE exhaust	Conduct subsequent performance tests semiannually. ¹
4. Existing non-emergency, non-black start CI stationary RICE with a brake horsepower > 500 that are not limited use stationary RICE; existing non-emergency, non-black start 4SLB and 4SRB stationary RICE located at an area source of HAP emissions with a brake horsepower > 500 that are operated more than 24 hours per calendar year that are not limited use stationary RICE	Limit or reduce CO or formaldehyde emissions	Conduct subsequent performance tests every 8,760 hrs. or 3 years, whichever comes first.
5. Existing non-emergency, non-black start CI stationary RICE with a brake horsepower > 500 that are limited use stationary RICE; existing non-emergency, non-black start 4SLB and 4SRB stationary RICE located at an area source of HAP emissions with a brake horsepower > 500 that are operated more than 24 hours per calendar year and are limited use stationary RICE	Limit or reduce CO or formaldehyde emissions	Conduct subsequent performance tests every 8,760 hrs. or 5 years, whichever comes first.

¹ After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

[75 FR 51596, Aug. 20, 2010]

Table 4 to Subpart ZZZZ of Part 63—Requirements for Performance Tests

[Link to an amendment published at 78 FR 6711, January 30, 2013.](#)

As stated in §§ 63.6610, 63.6611, 63.6612, 63.6620, and 63.6640, you must comply with the following requirements for performance tests for stationary RICE:

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
1. 2SLB, 4SLB, and CI stationary	a. Reduce CO emissions	i. Measure the O ₂ at the inlet and outlet of the control device; and	(1) Portable CO and O ₂ analyzer	(a) Using ASTM D6522-00 (2005) ^a (incorporated by reference, see § 63.14). Measurements to determine

RICE				O ₂ must be made at the same time as the measurements for CO concentration.
		ii. Measure the CO at the inlet and the outlet of the control device	(1) Portable CO and O ₂ analyzer	(a) Using ASTM D6522-00 (2005) ^{a b} (incorporated by reference, see § 63.14) or Method 10 of 40 CFR appendix A. The CO concentration must be at 15 percent O ₂ , dry basis.
2. 4SRB stationary RICE	a. Reduce formaldehyde emissions	i. Select the sampling port location and the number of traverse points; and	(1) Method 1 or 1A of 40 CFR part 60, appendix A § 63.7(d)(1)(i)	(a) Sampling sites must be located at the inlet and outlet of the control device.
		ii. Measure O ₂ at the inlet and outlet of the control device; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522-00m (2005)	(a) Measurements to determine O ₂ concentration must be made at the same time as the measurements for formaldehyde concentration.
		iii. Measure moisture content at the inlet and outlet of the control device; and	(1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.
		iv. Measure formaldehyde at the inlet and the outlet of the control device	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348-03, ^c provided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130	(a) Formaldehyde concentration must be at 15 percent O ₂ , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
3. Stationary RICE	a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust	i. Select the sampling port location and the number of traverse points; and	(1) Method 1 or 1A of 40 CFR part 60, appendix A § 63.7(d)(1)(i)	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O ₂ concentration of the stationary RICE exhaust at the sampling port location; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522-00 (2005)	(a) Measurements to determine O ₂ concentration must be made at the same time and location as the measurements for formaldehyde concentration.
		iii. Measure moisture content of	(1) Method 4 of 40 CFR part 60, appendix A, or	(a) Measurements to determine moisture content

		the stationary RICE exhaust at the sampling port location; and	Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03	must be made at the same time and location as the measurements for formaldehyde concentration.
		iv. Measure formaldehyde at the exhaust of the stationary RICE; or	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348-03, ^c provided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130	(a) Formaldehyde concentration must be at 15 percent O ₂ , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
		v. Measure CO at the exhaust of the stationary RICE	(1) Method 10 of 40 CFR part 60, appendix A, ASTM Method D6522-00 (2005), ^a Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03	(a) CO Concentration must be at 15 percent O ₂ , dry basis. Results of this test consist of the average of the three 1-hour longer runs.

^a You may also use Methods 3A and 10 as options to ASTM-D6522-00 (2005). You may obtain a copy of ASTM-D6522-00 (2005) from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106. ASTM-D6522-00 (2005) may be used to test both CI and SI stationary RICE.

^b You may also use Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03.

^c You may obtain a copy of ASTM-D6348-03 from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

[75 FR 51597, Aug. 20, 2010]

Table 5 to Subpart ZZZZ of Part 63—Initial Compliance With Emission Limitations and Operating Limitations

[Link to an amendment published at 78 FR 6712, January 30, 2013.](#)

As stated in §§ 63.6612, 63.6625 and 63.6630, you must initially comply with the emission and operating limitations as required by the following:

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
1. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB	a. Reduce CO emissions and using oxidation catalyst, and using a CPMS	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and

stationary RICE ≥ 250 HP located at a major source of HAP, non-emergency stationary CI RICE > 500 HP located at a major source of HAP, existing non-emergency stationary CI RICE > 500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE > 500 HP located at an area source of HAP that are operated more than 24 hours per calendar year		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b); and iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
2. Non-emergency stationary CI RICE > 500 HP located at a major source of HAP, existing non-emergency stationary CI RICE > 500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE > 500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	a. Limit the concentration of CO, using oxidation catalyst, and using a CPMS	i. The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b); and iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
3. New or reconstructed non-emergency 2SLB stationary RICE > 500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥ 250 HP located at a major source of HAP, non-emergency stationary CI RICE > 500 HP located at a major source of HAP, existing non-emergency stationary CI RICE > 500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE > 500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	a. Reduce CO emissions and not using oxidation catalyst	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in § 63.6625(b); and iii. You have recorded the approved operating parameters (if any) during the initial performance test.
4. Non-emergency stationary CI RICE > 500 HP located at a major source of HAP, existing non-emergency stationary CI RICE > 500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE > 500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	a. Limit the concentration of CO, and not using oxidation catalyst	i. The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in § 63.6625(b); and iii. You have recorded the approved operating parameters (if any) during the initial performance test.
5. New or reconstructed non-emergency 2SLB stationary RICE > 500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB	a. Reduce CO emissions, and using a CEMS	i. You have installed a CEMS to continuously monitor CO and either O ₂ or CO ₂ at both the inlet and outlet of the oxidation catalyst according to the

stationary RICE ≥ 250 HP located at a major source of HAP, non-emergency stationary CI RICE >500 HP located at a major source of HAP, existing non-emergency stationary CI RICE >500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year		requirements in § 63.6625(a); and ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and iii. The average reduction of CO calculated using § 63.6620 equals or exceeds the required percent reduction. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average percent reduction achieved during the 4-hour period.
6. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, existing non-emergency stationary CI RICE >500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	a. Limit the concentration of CO, and using a CEMS	i. You have installed a CEMS to continuously monitor CO and either O ₂ or CO ₂ at the outlet of the oxidation catalyst according to the requirements in § 63.6625(a); and ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and
		iii. The average concentration of CO calculated using § 63.6620 is less than or equal to the CO emission limitation. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average concentration measured during the 4-hour period.
7. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP, and existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	a. Reduce formaldehyde emissions and using NSCR	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
8. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP, and existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	a. Reduce formaldehyde emissions and not using NSCR	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the

		Administrator (if any) according to the requirements in § 63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
9. Existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	a. Limit the concentration of formaldehyde and not using NSCR	i. The average formaldehyde concentration determined from the initial performance test is less than or equal to the formaldehyde emission limitation; and
		ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in § 63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
10. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE $250 \leq \text{HP} \leq 500$ located at a major source of HAP, and existing non-emergency 4SRB stationary RICE >500 HP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR	i. The average formaldehyde concentration, corrected to 15 percent O ₂ , dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
11. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE $250 \leq \text{HP} \leq 500$ located at a major source of HAP, and existing non-emergency 4SRB stationary RICE >500 HP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR	i. The average formaldehyde concentration, corrected to 15 percent O ₂ , dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and
		ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in § 63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
12. Existing non-emergency stationary RICE $100 \leq \text{HP} \leq 500$ located at a major source of HAP, and existing non-emergency stationary CI RICE $300 < \text{HP} \leq 500$ located at an area source of	a. Reduce CO or formaldehyde emissions	i. The average reduction of emissions of CO or formaldehyde, as applicable determined from the initial performance test is equal to or greater than the required CO or formaldehyde,

HAP		as applicable, percent reduction.
13. Existing non-emergency stationary RICE $100 \leq \text{HP} \leq 500$ located at a major source of HAP, and existing non-emergency stationary CI RICE $300 < \text{HP} \leq 500$ located at an area source of HAP	a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust	i. The average formaldehyde or CO concentration, as applicable, corrected to 15 percent O ₂ , dry basis, from the three test runs is less than or equal to the formaldehyde or CO emission limitation, as applicable.

[76 FR 12867, Mar. 9, 2011]

Table 6 to Subpart ZZZZ of Part 63—Continuous Compliance With Emission Limitations, Operating Limitations, Work Practices, and Management Practices

[Link to an amendment published at 78 FR 6715, January 30, 2013.](#)

As stated in § 63.6640, you must continuously comply with the emissions and operating limitations and work or management practices as required by the following:

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
1. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥ 250 HP located at a major source of HAP, and new or reconstructed non-emergency CI stationary RICE >500 HP located at a major source of HAP	a. Reduce CO emissions and using an oxidation catalyst, and using a CPMS	i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved; ^a and ii. Collecting the catalyst inlet temperature data according to § 63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
2. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥ 250 HP located at a major source of HAP, and new or reconstructed non-emergency CI stationary RICE >500 HP located at a major source of HAP	a. Reduce CO emissions and not using an oxidation catalyst, and using a CPMS	i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved; ^a and ii. Collecting the approved operating parameter (if any) data according to § 63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating

		limitations for the operating parameters established during the performance test.
3. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, new or reconstructed non-emergency stationary CI RICE >500 HP located at a major source of HAP, existing non-emergency stationary CI RICE >500 HP, existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and using a CEMS	i. Collecting the monitoring data according to § 63.6625(a), reducing the measurements to 1-hour averages, calculating the percent reduction or concentration of CO emissions according to § 63.6620; and ii. Demonstrating that the catalyst achieves the required percent reduction of CO emissions over the 4-hour averaging period, or that the emission remain at or below the CO concentration limit; and iii. Conducting an annual RATA of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B, as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.
4. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and using NSCR	i. Collecting the catalyst inlet temperature data according to § 63.6625(b); and
		ii. Reducing these data to 4-hour rolling averages; and
		iii. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		iv. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
5. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and not using NSCR	i. Collecting the approved operating parameter (if any) data according to § 63.6625(b); and ii. Reducing these data to 4-hour rolling averages; and
		iii. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
6. Non-emergency 4SRB stationary RICE with a brake HP ≥5,000 located at a major source of HAP	a. Reduce formaldehyde emissions	Conducting semiannual performance tests for formaldehyde to demonstrate that the required formaldehyde

		percent reduction is achieved. ^a
7. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP and new or reconstructed non-emergency 4SLB stationary RICE 250 ≤HP≤500 located at a major source of HAP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit; ^a and ii. Collecting the catalyst inlet temperature data according to § 63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
8. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP and new or reconstructed non-emergency 4SLB stationary RICE 250 ≤HP≤500 located at a major source of HAP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit; ^a and ii. Collecting the approved operating parameter (if any) data according to § 63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
9. Existing emergency and black start stationary RICE ≤500 HP located at a major source of HAP, existing non-emergency stationary RICE <100 HP located at a major source of HAP, existing emergency and black start stationary RICE located at an area source of HAP, existing non-emergency stationary CI RICE ≤300 HP located at an area source of HAP, existing non-emergency 2SLB stationary RICE located at an area source of HAP, existing non-emergency landfill or digester gas stationary SI RICE located	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE ≤500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year		
10. Existing stationary CI RICE >500 HP that are not limited use stationary RICE, and existing 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate more than 24 hours per calendar year and are not limited use stationary RICE	a. Reduce CO or formaldehyde emissions, or limit the concentration of formaldehyde or CO in the stationary RICE exhaust, and using oxidation catalyst or NSCR	i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
		ii. Collecting the catalyst inlet temperature data according to § 63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
11. Existing stationary CI RICE >500 HP that are not limited use stationary RICE, and existing 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate more than 24 hours per calendar year and are not limited use stationary RICE	a. Reduce CO or formaldehyde emissions, or limit the concentration of formaldehyde or CO in the stationary RICE exhaust, and not using oxidation catalyst or NSCR	i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
		ii. Collecting the approved operating parameter (if any) data according to § 63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating

		parameters established during the performance test.
12. Existing limited use CI stationary RICE >500 HP and existing limited use 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate more than 24 hours per calendar year	a. Reduce CO or formaldehyde emissions or limit the concentration of formaldehyde or CO in the stationary RICE exhaust, and using an oxidation catalyst or NSCR	i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
		ii. Collecting the catalyst inlet temperature data according to § 63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
13. Existing limited use CI stationary RICE >500 HP and existing limited use 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate more than 24 hours per calendar year	a. Reduce CO or formaldehyde emissions or limit the concentration of formaldehyde or CO in the stationary RICE exhaust, and not using an oxidation catalyst or NSCR	i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
		ii. Collecting the approved operating parameter (if any) data according to § 63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.

^a After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test

indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

[76 FR 12870, Mar. 9, 2011]

Table 7 to Subpart ZZZZ of Part 63—Requirements for Reports

[Link to an amendment published at 78 FR 6719, January 30, 2013.](#)

As stated in § 63.6650, you must comply with the following requirements for reports:

For each ...	You must submit a ...	The report must contain ...	You must submit the report ...
1. Existing non-emergency, non-black start stationary RICE $100 \leq \text{HP} \leq 500$ located at a major source of HAP; existing non-emergency, non-black start stationary CI RICE > 500 HP located at a major source of HAP; existing non-emergency 4SRB stationary RICE > 500 HP located at a major source of HAP; existing non-emergency, non-black start stationary CI RICE > 300 HP located at an area source of HAP; existing non-emergency, non-black start 4SLB and 4SRB stationary RICE > 500 HP located at an area source of HAP and operated more than 24 hours per calendar year; new or reconstructed non-emergency stationary RICE > 500 HP located at a major source of HAP; and new or reconstructed non-emergency 4SLB stationary RICE $250 \leq \text{HP} \leq 500$ located at a major source of HAP	Compliance report	a. If there are no deviations from any emission limitations or operating limitations that apply to you, a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in § 63.8(c)(7), a statement that there were not periods during which the CMS was out-of-control during the reporting period; or b. If you had a deviation from any emission limitation or operating limitation during the reporting period, the information in § 63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in § 63.8(c)(7), the information in § 63.6650(e); or c. If you had a malfunction during the reporting period, the information in § 63.6650(c)(4)	i. Semiannually according to the requirements in § 63.6650(b)(1)-(5) for engines that are not limited use stationary RICE subject to numerical emission limitations; and ii. Annually according to the requirements in § 63.6650(b)(6)-(9) for engines that are limited use stationary RICE subject to numerical emission limitations.
2. New or reconstructed non-emergency stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis	Report	a. The fuel flow rate of each fuel and the heating values that were used in your calculations, and you must demonstrate that the percentage of heat input provided by landfill gas or digester gas, is equivalent to 10 percent or more of the gross heat input on an annual basis; and	i. Annually, according to the requirements in § 63.6650.
		b. The operating limits provided in your federally enforceable	i. See item 2.a.i.

		permit, and any deviations from these limits; and	
		c. Any problems or errors suspected with the meters.	i. See item 2.a.i.

[75 FR 51603, Aug. 20, 2010]

Table 8 to Subpart ZZZZ of Part 63—Applicability of General Provisions to Subpart ZZZZ.

[Link to an amendment published at 78 FR 6720, January 30, 2013.](#)

As stated in § 63.6665, you must comply with the following applicable general provisions.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§ 63.1	General applicability of the General Provisions	Yes.	
§ 63.2	Definitions	Yes	Additional terms defined in § 63.6675.
§ 63.3	Units and abbreviations	Yes.	
§ 63.4	Prohibited activities and circumvention	Yes.	
§ 63.5	Construction and reconstruction	Yes.	
§ 63.6(a)	Applicability	Yes.	
§ 63.6(b)(1)-(4)	Compliance dates for new and reconstructed sources	Yes.	
§ 63.6(b)(5)	Notification	Yes.	
§ 63.6(b)(6)	[Reserved]		
§ 63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes.	
§ 63.6(c)(1)-(2)	Compliance dates for existing sources	Yes.	
§ 63.6(c)(3)-(4)	[Reserved]		
§ 63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
§ 63.6(d)	[Reserved]		
§ 63.6(e)	Operation and maintenance	No.	
§ 63.6(f)(1)	Applicability of standards	No.	

§ 63.6(f)(2)	Methods for determining compliance	Yes.	
§ 63.6(f)(3)	Finding of compliance	Yes.	
§ 63.6(g)(1)-(3)	Use of alternate standard	Yes.	
§ 63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.
§ 63.6(i)	Compliance extension procedures and criteria	Yes.	
§ 63.6(j)	Presidential compliance exemption	Yes.	
§ 63.7(a)(1)-(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at §§ 63.6610, 63.6611, and 63.6612.
§ 63.7(a)(3)	CAA section 114 authority	Yes.	
§ 63.7(b)(1)	Notification of performance test	Yes	Except that § 63.7(b)(1) only applies as specified in § 63.6645.
§ 63.7(b)(2)	Notification of rescheduling	Yes	Except that § 63.7(b)(2) only applies as specified in § 63.6645.
§ 63.7(c)	Quality assurance/test plan	Yes	Except that § 63.7(c) only applies as specified in § 63.6645.
§ 63.7(d)	Testing facilities	Yes.	
§ 63.7(e)(1)	Conditions for conducting performance tests	No.	Subpart ZZZZ specifies conditions for conducting performance tests at § 63.6620.
§ 63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at § 63.6620.
§ 63.7(e)(3)	Test run duration	Yes.	
§ 63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes.	
§ 63.7(f)	Alternative test method provisions	Yes.	
§ 63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes.	
§ 63.7(h)	Waiver of tests	Yes.	
§ 63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at § 63.6625.
§ 63.8(a)(2)	Performance specifications	Yes.	

§ 63.8(a)(3)	[Reserved]		
§ 63.8(a)(4)	Monitoring for control devices	No.	
§ 63.8(b)(1)	Monitoring	Yes.	
§ 63.8(b)(2)-(3)	Multiple effluents and multiple monitoring systems	Yes.	
§ 63.8(c)(1)	Monitoring system operation and maintenance	Yes.	
§ 63.8(c)(1)(i)	Routine and predictable SSM	Yes.	
§ 63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§ 63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	Yes.	
§ 63.8(c)(2)-(3)	Monitoring system installation	Yes.	
§ 63.8(c)(4)	Continuous monitoring system (CMS) requirements	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§ 63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.
§ 63.8(c)(6)-(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
§ 63.8(d)	CMS quality control	Yes.	
§ 63.8(e)	CMS performance evaluation	Yes	Except for § 63.8(e)(5)(ii), which applies to COMS.
		Except that § 63.8(e) only applies as specified in § 63.6645.	
§ 63.8(f)(1)-(5)	Alternative monitoring method	Yes	Except that § 63.8(f)(4) only applies as specified in § 63.6645.
§ 63.8(f)(6)	Alternative to relative accuracy test	Yes	Except that § 63.8(f)(6) only applies as specified in § 63.6645.
§ 63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at §§ 63.6635 and 63.6640.
§ 63.9(a)	Applicability and State delegation of notification requirements	Yes.	
§ 63.9(b)(1)-(5)	Initial notifications	Yes	Except that § 63.9(b)(3) is reserved.

		Except that § 63.9(b) only applies as specified in § 63.6645.	
§ 63.9(c)	Request for compliance extension	Yes	Except that § 63.9(c) only applies as specified in § 63.6645.
§ 63.9(d)	Notification of special compliance requirements for new sources	Yes	Except that § 63.9(d) only applies as specified in § 63.6645.
§ 63.9(e)	Notification of performance test	Yes	Except that § 63.9(e) only applies as specified in § 63.6645.
§ 63.9(f)	Notification of visible emission (VE)/opacity test	No	Subpart ZZZZ does not contain opacity or VE standards.
§ 63.9(g)(1)	Notification of performance evaluation	Yes	Except that § 63.9(g) only applies as specified in § 63.6645.
§ 63.9(g)(2)	Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.
§ 63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded	Yes	If alternative is in use.
		Except that § 63.9(g) only applies as specified in § 63.6645.	
§ 63.9(h)(1)-(6)	Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. § 63.9(h)(4) is reserved.
			Except that § 63.9(h) only applies as specified in § 63.6645.
§ 63.9(i)	Adjustment of submittal deadlines	Yes.	
§ 63.9(j)	Change in previous information	Yes.	
§ 63.10(a)	Administrative provisions for recordkeeping/reporting	Yes.	
§ 63.10(b)(1)	Record retention	Yes.	
§ 63.10(b)(2)(i)-(v)	Records related to SSM	No.	
§ 63.10(b)(2)(vi)-(xi)	Records	Yes.	
§ 63.10(b)(2)(xii)	Record when under waiver	Yes.	
§ 63.10(b)(2)(xiii)	Records when using alternative	Yes	For CO standard if using RATA

	to RATA		alternative.
§ 63.10(b)(2)(xiv)	Records of supporting documentation	Yes.	
§ 63.10(b)(3)	Records of applicability determination	Yes.	
§ 63.10(c)	Additional records for sources using CEMS	Yes	Except that § 63.10(c)(2)-(4) and (9) are reserved.
§ 63.10(d)(1)	General reporting requirements	Yes.	
§ 63.10(d)(2)	Report of performance test results	Yes.	
§ 63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
§ 63.10(d)(4)	Progress reports	Yes.	
§ 63.10(d)(5)	Startup, shutdown, and malfunction reports	No.	
§ 63.10(e)(1) and (2)(i)	Additional CMS Reports	Yes.	
§ 63.10(e)(2)(ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.
§ 63.10(e)(3)	Excess emission and parameter exceedances reports	Yes.	Except that § 63.10(e)(3)(i) (C) is reserved.
§ 63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§ 63.10(f)	Waiver for recordkeeping/reporting	Yes.	
§ 63.11	Flares	No.	
§ 63.12	State authority and delegations	Yes.	
§ 63.13	Addresses	Yes.	
§ 63.14	Incorporation by reference	Yes.	
§ 63.15	Availability of information	Yes.	

**Indiana Department of Environmental Management
Office of Air Quality**

Attachment D

Title 40: Protection of the Environment

PART 60--STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

Subpart Cc—Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills

SOURCE:: 61 FR 9919, Mar. 12, 1996, unless otherwise noted.

§ 60.30c Scope.

This subpart contains emission guidelines and compliance times for the control of certain designated pollutants from certain designated municipal solid waste landfills in accordance with section 111(d) of the Act and subpart B.

§ 60.31c Definitions.

Terms used but not defined in this subpart have the meaning given them in the Act and in subparts A, B, and WWW of this part.

Municipal solid waste landfill or MSW landfill means an entire disposal facility in a contiguous geographical space where household waste is placed in or on land. An MSW landfill may also receive other types of RCRA Subtitle D wastes such as commercial solid waste, nonhazardous sludge, conditionally exempt small quantity generator waste, and industrial solid waste. Portions of an MSW landfill may be separated by access roads. An MSW landfill may be publicly or privately owned. An MSW landfill may be a new MSW landfill, an existing MSW landfill or a lateral expansion.

§ 60.32c Designated facilities.

(a) The designated facility to which the guidelines apply is each existing MSW landfill for which construction, reconstruction or modification was commenced before May 30, 1991.

(b) Physical or operational changes made to an existing MSW landfill solely to comply with an emission guideline are not considered a modification or reconstruction and would not subject an existing MSW landfill to the requirements of subpart WWW [see § 60.750 of subpart WWW].

(c) For purposes of obtaining an operating permit under title V of the Act, the owner or operator of a MSW landfill subject to this subpart with a design capacity less than 2.5 million megagrams or 2.5 million cubic meters is not subject to the requirement to obtain an operating permit for the landfill under part 70 or 71 of this chapter, unless the landfill is otherwise subject to either part 70 or 71. For purposes of submitting a timely application for an operating permit under part 70 or 71, the owner or operator of a MSW landfill subject to this subpart with a design capacity greater than or equal to 2.5 million megagrams and 2.5 million cubic meters on the effective date of EPA approval of the State's program under section 111(d) of the Act, and not otherwise subject to either part 70 or 71, becomes subject to the requirements of §§ 70.5(a)(1)(i) or 71.5(a)(1)(i) of this

chapter 90 days after the effective date of such 111(d) program approval, even if the design capacity report is submitted earlier.

(d) When a MSW landfill subject to this subpart is closed, the owner or operator is no longer subject to the requirement to maintain an operating permit under part 70 or 71 of this chapter for the landfill if the landfill is not otherwise subject to the requirements of either part 70 or 71 and if either of the following conditions are met.

(1) The landfill was never subject to the requirement for a control system under § 60.33c(c) of this subpart; or

(2) The owner or operator meets the conditions for control system removal specified in § 60.752(b)(2)(v) of subpart WWW.

[61 FR 9919, Mar. 12, 1996, as amended at 63 FR 32750, June 16, 1998]

§ 60.33c Emission guidelines for municipal solid waste landfill emissions.

(a) For approval, a State plan shall include control of MSW landfill emissions at each MSW landfill meeting the following three conditions:

(1) The landfill has accepted waste at any time since November 8, 1987, or has additional design capacity available for future waste deposition;

(2) The landfill has a design capacity greater than or equal to 2.5 million megagrams and 2.5 million cubic meters. The landfill may calculate design capacity in either megagrams or cubic meters for comparison with the exemption values. Any density conversions shall be documented and submitted with the design capacity report; and

(3) The landfill has a nonmethane organic compound emission rate of 50 megagrams per year or more.

(b) For approval, a State plan shall include the installation of a collection and control system meeting the conditions provided in § 60.752(b)(2)(ii) of this part at each MSW landfill meeting the conditions in paragraph (a) of this section. The State plan shall include a process for State review and approval of the site-specific design plans for the gas collection and control system(s).

(c) For approval, a State plan shall include provisions for the control of collected MSW landfill emissions through the use of control devices meeting the requirements of paragraph (c)(1), (2), or (3) of this section, except as provided in § 60.24.

(1) An open flare designed and operated in accordance with the parameters established in § 60.18; or

(2) A control system designed and operated to reduce NMOC by 98 weight percent; or

(3) An enclosed combustor designed and operated to reduce the outlet NMOC concentration to 20 parts per million as hexane by volume, dry basis at 3 percent oxygen, or less.

(d) For approval, a State plan shall require each owner or operator of an MSW landfill having a design capacity less than 2.5 million megagrams by mass or 2.5 million cubic meters by volume to submit an initial design capacity report to the Administrator as provided in § 60.757(a)(2) of

subpart WWW by the date specified in § 60.35c of this subpart. The landfill may calculate design capacity in either megagrams or cubic meters for comparison with the exemption values. Any density conversions shall be documented and submitted with the report. Submittal of the initial design capacity report shall fulfill the requirements of this subpart except as provided in paragraph (d)(1) and (d)(2) of this section.

(1) The owner or operator shall submit an amended design capacity report as provided in § 60.757(a)(3) of subpart WWW. [Guidance: Note that if the design capacity increase is the result of a modification, as defined in § 60.751 of subpart WWW, that was commenced on or after May 30, 1991, the landfill will become subject to subpart WWW instead of this subpart. If the design capacity increase is the result of a change in operating practices, density, or some other change that is not a modification, the landfill remains subject to this subpart.]

(2) When an increase in the maximum design capacity of a landfill with an initial design capacity less than 2.5 million megagrams or 2.5 million cubic meters results in a revised maximum design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters, the owner or operator shall comply with paragraph (e) of this section.

(e) For approval, a State plan shall require each owner or operator of an MSW landfill having a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters to either install a collection and control system as provided in paragraph (b) of this section and § 60.752(b)(2) of subpart WWW or calculate an initial NMOC emission rate for the landfill using the procedures specified in § 60.34c of this subpart and § 60.754 of subpart WWW. The NMOC emission rate shall be recalculated annually, except as provided in § 60.757(b)(1)(ii) of subpart WWW.

(1) If the calculated NMOC emission rate is less than 50 megagrams per year, the owner or operator shall:

(i) Submit an annual emission report, except as provided for in § 60.757(b)(1)(ii); and

(ii) Recalculate the NMOC emission rate annually using the procedures specified in § 60.754(a)(1) of subpart WWW until such time as the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, or the landfill is closed.

(2)(i) If the NMOC emission rate, upon initial calculation or annual recalculation required in paragraph (e)(1)(ii) of this section, is equal to or greater than 50 megagrams per year, the owner or operator shall install a collection and control system as provided in paragraph (b) of this section and § 60.752(b)(2) of subpart WWW.

(ii) If the landfill is permanently closed, a closure notification shall be submitted to the Administrator as provided in § 60.35c of this subpart and § 60.757(d) of subpart WWW.

[61 FR 9919, Mar. 12, 1996, as amended at 63 FR 32750, June 16, 1998; 64 FR 9261, Feb. 24, 1999]

§ 60.34c Test methods and procedures.

For approval, a State plan shall include provisions for: the calculation of the landfill NMOC emission rate listed in § 60.754, as applicable, to determine whether the landfill meets the condition in § 60.33c(a)(3); the operational standards in § 60.753; the compliance provisions in § 60.755; and the monitoring provisions in § 60.756.

§ 60.35c Reporting and recordkeeping guidelines.

For approval, a State plan shall include the recordkeeping and reporting provisions listed in §§ 60.757 and 60.758, as applicable, except as provided under § 60.24.

(a) For existing MSW landfills subject to this subpart the initial design capacity report shall be submitted no later than 90 days after the effective date of EPA approval of the State's plan under section 111(d) of the Act.

(b) For existing MSW landfills covered by this subpart with a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters, the initial NMOC emission rate report shall be submitted no later than 90 days after the effective date of EPA approval of the State's plan under section 111(d) of the Act.

[61 FR 9919, Mar. 12, 1996, as amended at 64 FR 9262, Feb. 24, 1999]

§ 60.36c Compliance times.

(a) Except as provided for under paragraph (b) of this section, planning, awarding of contracts, and installation of MSW landfill air emission collection and control equipment capable of meeting the emission guidelines established under § 60.33c shall be accomplished within 30 months after the date the initial NMOC emission rate report shows NMOC emissions equal or exceed 50 megagrams per year.

(b) For each existing MSW landfill meeting the conditions in § 60.33c(a)(1) and § 60.33c(a)(2) whose NMOC emission rate is less than 50 megagrams per year on the effective date of the State emission standard, installation of collection and control systems capable of meeting emission guidelines in § 60.33c shall be accomplished within 30 months of the date when the condition in § 60.33c(a)(3) is met (i.e., the date of the first annual nonmethane organic compounds emission rate which equals or exceeds 50 megagrams per year).

[61 FR 9919, Mar. 12, 1996, as amended at 63 FR 32750, June 16, 1998]

**Indiana Department of Environmental Management
Office of Air Quality**

Attachment E

Title 40: Protection of Environment

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (CONTINUED)

Subpart CCCCCC—National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities

Source: 73 FR 1945, Jan. 10, 2008, unless otherwise noted.

What This Subpart Covers

§ 63.11110 What is the purpose of this subpart?

This subpart establishes national emission limitations and management practices for hazardous air pollutants (HAP) emitted from the loading of gasoline storage tanks at gasoline dispensing facilities (GDF). This subpart also establishes requirements to demonstrate compliance with the emission limitations and management practices.

§ 63.11111 Am I subject to the requirements in this subpart?

(a) The affected source to which this subpart applies is each GDF that is located at an area source. The affected source includes each gasoline cargo tank during the delivery of product to a GDF and also includes each storage tank.

(b) If your GDF has a monthly throughput of less than 10,000 gallons of gasoline, you must comply with the requirements in §63.11116.

(c) If your GDF has a monthly throughput of 10,000 gallons of gasoline or more, you must comply with the requirements in §63.11117.

(d) If your GDF has a monthly throughput of 100,000 gallons of gasoline or more, you must comply with the requirements in §63.11118.

(e) An affected source shall, upon request by the Administrator, demonstrate that their monthly throughput is less than the 10,000-gallon or the 100,000-gallon threshold level, as applicable. For new or reconstructed affected sources, as specified in §63.11112(b) and (c), recordkeeping to document monthly throughput must begin upon startup of the affected source. For existing sources, as specified in §63.11112(d), recordkeeping to document monthly throughput must begin on January 10, 2008. For existing sources that are subject to this subpart only because they load gasoline into fuel tanks other than those in motor vehicles, as defined in §63.11132, recordkeeping to document monthly throughput must begin on January 24, 2011. Records required under this paragraph shall be kept for a period of 5 years.

(f) If you are an owner or operator of affected sources, as defined in paragraph (a) of this section, you are not required to obtain a permit under 40 CFR part 70 or 40 CFR part 71 as a result of being subject to this subpart. However, you must still apply for and obtain a permit under 40 CFR part 70 or 40 CFR part 71 if you meet one or more of the applicability criteria found in 40 CFR 70.3(a) and (b) or 40 CFR 71.3(a) and (b).

(g) The loading of aviation gasoline into storage tanks at airports, and the subsequent transfer of aviation gasoline within the airport, is not subject to this subpart.

(h) Monthly throughput is the total volume of gasoline loaded into, or dispensed from, all the gasoline storage tanks located at a single affected GDF. If an area source has two or more GDF at separate locations within the area source, each GDF is treated as a separate affected source.

(i) If your affected source's throughput ever exceeds an applicable throughput threshold, the affected source will remain subject to the requirements for sources above the threshold, even if the affected source throughput later falls below the applicable throughput threshold.

(j) The dispensing of gasoline from a fixed gasoline storage tank at a GDF into a portable gasoline tank for the on-site delivery and subsequent dispensing of the gasoline into the fuel tank of a motor vehicle or other gasoline-fueled engine or equipment used within the area source is only subject to §63.11116 of this subpart.

(k) For any affected source subject to the provisions of this subpart and another Federal rule, you may elect to comply only with the more stringent provisions of the applicable subparts. You must consider all provisions of the rules, including monitoring, recordkeeping, and reporting. You must identify the affected source and provisions with which you will comply in your Notification of Compliance Status required under §63.11124. You also must demonstrate in your Notification of Compliance Status that each provision with which you will comply is at least as stringent as the otherwise applicable requirements in this subpart. You are responsible for making accurate determinations concerning the more stringent provisions, and noncompliance with this rule is not excused if it is later determined that your determination was in error, and, as a result, you are violating this subpart. Compliance with this rule is your responsibility and the Notification of Compliance Status does not alter or affect that responsibility.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4181, Jan. 24, 2011]

§ 63.11112 What parts of my affected source does this subpart cover?

(a) The emission sources to which this subpart applies are gasoline storage tanks and associated equipment components in vapor or liquid gasoline service at new, reconstructed, or existing GDF that meet the criteria specified in §63.11111. Pressure/Vacuum vents on gasoline storage tanks and the equipment necessary to unload product from cargo tanks into the storage tanks at GDF are covered emission sources. The equipment used for the refueling of motor vehicles is not covered by this subpart.

(b) An affected source is a new affected source if you commenced construction on the affected source after November 9, 2006, and you meet the applicability criteria in §63.11111 at the time you commenced operation.

(c) An affected source is reconstructed if you meet the criteria for reconstruction as defined in §63.2.

(d) An affected source is an existing affected source if it is not new or reconstructed.

§ 63.11113 When do I have to comply with this subpart?

(a) If you have a new or reconstructed affected source, you must comply with this subpart according to paragraphs (a)(1) and (2) of this section, except as specified in paragraph (d) of this section.

(1) If you start up your affected source before January 10, 2008, you must comply with the standards in this subpart no later than January 10, 2008.

(2) If you start up your affected source after January 10, 2008, you must comply with the standards in this subpart upon startup of your affected source.

(b) If you have an existing affected source, you must comply with the standards in this subpart no later than January 10, 2011.

(c) If you have an existing affected source that becomes subject to the control requirements in this subpart because of an increase in the monthly throughput, as specified in §63.11111(c) or §63.11111(d), you must comply with the standards in this subpart no later than 3 years after the affected source becomes subject to the control requirements in this subpart.

(d) If you have a new or reconstructed affected source and you are complying with Table 1 to this subpart, you must comply according to paragraphs (d)(1) and (2) of this section.

(1) If you start up your affected source from November 9, 2006 to September 23, 2008, you must comply no later than September 23, 2008.

(2) If you start up your affected source after September 23, 2008, you must comply upon startup of your affected source.

(e) The initial compliance demonstration test required under §63.11120(a)(1) and (2) must be conducted as specified in paragraphs (e)(1) and (2) of this section.

(1) If you have a new or reconstructed affected source, you must conduct the initial compliance test upon installation of the complete vapor balance system.

(2) If you have an existing affected source, you must conduct the initial compliance test as specified in paragraphs (e)(2)(i) or (e)(2)(ii) of this section.

(i) For vapor balance systems installed on or before December 15, 2009, you must test no later than 180 days after the applicable compliance date specified in paragraphs (b) or (c) of this section.

(ii) For vapor balance systems installed after December 15, 2009, you must test upon installation of the complete vapor balance system.

(f) If your GDF is subject to the control requirements in this subpart only because it loads gasoline into fuel tanks other than those in motor vehicles, as defined in §63.11132, you must comply with the standards in this subpart as specified in paragraphs (f)(1) or (f)(2) of this section.

(1) If your GDF is an existing facility, you must comply by January 24, 2014.

(2) If your GDF is a new or reconstructed facility, you must comply by the dates specified in paragraphs (f)(2)(i) and (ii) of this section.

(i) If you start up your GDF after December 15, 2009, but before January 24, 2011, you must comply no later than January 24, 2011.

(ii) If you start up your GDF after January 24, 2011, you must comply upon startup of your GDF.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 35944, June 25, 2008; 76 FR 4181, Jan. 24, 2011]

Emission Limitations and Management Practices

§ 63.11115 What are my general duties to minimize emissions?

Each owner or operator of an affected source under this subpart must comply with the requirements of paragraphs (a) and (b) of this section.

(a) You must, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(b) You must keep applicable records and submit reports as specified in §63.11125(d) and §63.11126(b).

[76 FR 4182, Jan. 24, 2011]

§ 63.11116 Requirements for facilities with monthly throughput of less than 10,000 gallons of gasoline.

(a) You must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:

(1) Minimize gasoline spills;

(2) Clean up spills as expeditiously as practicable;

(3) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;

(4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

(b) You are not required to submit notifications or reports as specified in §63.11125, §63.11126, or subpart A of this part, but you must have records available within 24 hours of a request by the Administrator to document your gasoline throughput.

(c) You must comply with the requirements of this subpart by the applicable dates specified in §63.11113.

(d) Portable gasoline containers that meet the requirements of 40 CFR part 59, subpart F, are considered acceptable for compliance with paragraph (a)(3) of this section.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4182, Jan. 24, 2011]

§ 63.11117 Requirements for facilities with monthly throughput of 10,000 gallons of gasoline or more.

(a) You must comply with the requirements in section §63.11116(a).

(b) Except as specified in paragraph (c) of this section, you must only load gasoline into storage tanks at your facility by utilizing submerged filling, as defined in §63.11132, and as specified in paragraphs (b)(1), (b)(2), or (b)(3) of this section. The applicable distances in paragraphs (b)(1) and (2) shall be measured from the point in the opening of the submerged fill pipe that is the greatest distance from the bottom of the storage tank.

(1) Submerged fill pipes installed on or before November 9, 2006, must be no more than 12 inches from the bottom of the tank.

(2) Submerged fill pipes installed after November 9, 2006, must be no more than 6 inches from the bottom of the tank.

(3) Submerged fill pipes not meeting the specifications of paragraphs (b)(1) or (b)(2) of this section are allowed if the owner or operator can demonstrate that the liquid level in the tank is always above the entire opening of the fill pipe. Documentation providing such demonstration must be made available for inspection by the Administrator's delegated representative during the course of a site visit.

(c) Gasoline storage tanks with a capacity of less than 250 gallons are not required to comply with the submerged fill requirements in paragraph (b) of this section, but must comply only with all of the requirements in §63.11116.

(d) You must have records available within 24 hours of a request by the Administrator to document your gasoline throughput.

(e) You must submit the applicable notifications as required under §63.11124(a).

(f) You must comply with the requirements of this subpart by the applicable dates contained in §63.11113.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 12276, Mar. 7, 2008; 76 FR 4182, Jan. 24, 2011]

§ 63.11118 Requirements for facilities with monthly throughput of 100,000 gallons of gasoline or more.

(a) You must comply with the requirements in §§63.11116(a) and 63.11117(b).

(b) Except as provided in paragraph (c) of this section, you must meet the requirements in either paragraph (b)(1) or paragraph (b)(2) of this section.

(1) Each management practice in Table 1 to this subpart that applies to your GDF.

(2) If, prior to January 10, 2008, you satisfy the requirements in both paragraphs (b)(2)(i) and (ii) of this section, you will be deemed in compliance with this subsection.

(i) You operate a vapor balance system at your GDF that meets the requirements of either paragraph (b)(2)(i)(A) or paragraph (b)(2)(i)(B) of this section.

(A) Achieves emissions reduction of at least 90 percent.

(B) Operates using management practices at least as stringent as those in Table 1 to this subpart.

(ii) Your gasoline dispensing facility is in compliance with an enforceable State, local, or tribal rule or permit that contains requirements of either paragraph (b)(2)(i)(A) or paragraph (b)(2)(i)(B) of this section.

(c) The emission sources listed in paragraphs (c)(1) through (3) of this section are not required to comply with the control requirements in paragraph (b) of this section, but must comply with the requirements in §63.11117.

(1) Gasoline storage tanks with a capacity of less than 250 gallons that are constructed after January 10, 2008.

(2) Gasoline storage tanks with a capacity of less than 2,000 gallons that were constructed before January 10, 2008.

(3) Gasoline storage tanks equipped with floating roofs, or the equivalent.

(d) Cargo tanks unloading at GDF must comply with the management practices in Table 2 to this subpart.

- (e) You must comply with the applicable testing requirements contained in §63.11120.
- (f) You must submit the applicable notifications as required under §63.11124.
- (g) You must keep records and submit reports as specified in §§63.11125 and 63.11126.
- (h) You must comply with the requirements of this subpart by the applicable dates contained in §63.11113.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 12276, Mar. 7, 2008]

Testing and Monitoring Requirements

§ 63.11120 What testing and monitoring requirements must I meet?

(a) Each owner or operator, at the time of installation, as specified in §63.11113(e), of a vapor balance system required under §63.11118(b)(1), and every 3 years thereafter, must comply with the requirements in paragraphs (a)(1) and (2) of this section.

(1) You must demonstrate compliance with the leak rate and cracking pressure requirements, specified in item 1(g) of Table 1 to this subpart, for pressure-vacuum vent valves installed on your gasoline storage tanks using the test methods identified in paragraph (a)(1)(i) or paragraph (a)(1)(ii) of this section.

(i) California Air Resources Board Vapor Recovery Test Procedure TP–201.1E,—Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves, adopted October 8, 2003 (incorporated by reference, see §63.14).

(ii) Use alternative test methods and procedures in accordance with the alternative test method requirements in §63.7(f).

(2) You must demonstrate compliance with the static pressure performance requirement specified in item 1(h) of Table 1 to this subpart for your vapor balance system by conducting a static pressure test on your gasoline storage tanks using the test methods identified in paragraphs (a)(2)(i), (a)(2)(ii), or (a)(2)(iii) of this section.

(i) California Air Resources Board Vapor Recovery Test Procedure TP–201.3,—Determination of 2-Inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities, adopted April 12, 1996, and amended March 17, 1999 (incorporated by reference, see §63.14).

(ii) Use alternative test methods and procedures in accordance with the alternative test method requirements in §63.7(f).

(iii) Bay Area Air Quality Management District Source Test Procedure ST–30—Static Pressure Integrity Test—Underground Storage Tanks, adopted November 30, 1983, and amended December 21, 1994 (incorporated by reference, see §63.14).

(b) Each owner or operator choosing, under the provisions of §63.6(g), to use a vapor balance system other than that described in Table 1 to this subpart must demonstrate to the Administrator or delegated authority under paragraph §63.11131(a) of this subpart, the equivalency of their vapor balance system to that described in Table 1 to this subpart using the procedures specified in paragraphs (b)(1) through (3) of this section.

(1) You must demonstrate initial compliance by conducting an initial performance test on the vapor balance system to demonstrate that the vapor balance system achieves 95 percent reduction using the California Air Resources Board Vapor Recovery Test Procedure TP–201.1,—Volumetric Efficiency for Phase I Vapor Recovery Systems, adopted April 12, 1996, and amended February 1, 2001, and October 8, 2003, (incorporated by reference, see §63.14).

(2) You must, during the initial performance test required under paragraph (b)(1) of this section, determine and document alternative acceptable values for the leak rate and cracking pressure requirements specified in item 1(g) of Table 1 to this subpart and for the static pressure performance requirement in item 1(h) of Table 1 to this subpart.

(3) You must comply with the testing requirements specified in paragraph (a) of this section.

(c) Conduct of performance tests. Performance tests conducted for this subpart shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance (*i.e.*, performance based on normal operating conditions) of the affected source. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(d) Owners and operators of gasoline cargo tanks subject to the provisions of Table 2 to this subpart must conduct annual certification testing according to the vapor tightness testing requirements found in §63.11092(f).

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4182, Jan. 24, 2011]

Notifications, Records, and Reports

§ 63.11124 What notifications must I submit and when?

(a) Each owner or operator subject to the control requirements in §63.11117 must comply with paragraphs (a)(1) through (3) of this section.

(1) You must submit an Initial Notification that you are subject to this subpart by May 9, 2008, or at the time you become subject to the control requirements in §63.11117, unless you meet the requirements in paragraph (a)(3) of this section. If your affected source is subject to the control requirements in §63.11117 only because it loads gasoline into fuel tanks other than those in motor vehicles, as defined in §63.11132, you must submit the Initial Notification by May 24, 2011. The Initial Notification must contain the information specified in paragraphs (a)(1)(i) through (iii) of this section. The notification must be submitted to the applicable EPA Regional Office and delegated State authority as specified in §63.13.

(i) The name and address of the owner and the operator.

(ii) The address (*i.e.*, physical location) of the GDF.

(iii) A statement that the notification is being submitted in response to this subpart and identifying the requirements in paragraphs (a) through (c) of §63.11117 that apply to you.

(2) You must submit a Notification of Compliance Status to the applicable EPA Regional Office and the delegated State authority, as specified in §63.13, within 60 days of the applicable compliance date specified in §63.11113, unless you meet the requirements in paragraph (a)(3) of this section. The Notification of Compliance Status must be signed by a responsible official who must certify its accuracy, must indicate whether the source has complied with the requirements of this subpart, and must indicate whether the facilities' monthly throughput is calculated based on the volume of gasoline loaded into all storage tanks or on the volume of gasoline dispensed from all storage tanks. If your facility is in compliance with the requirements of this subpart at the time the Initial Notification required under paragraph (a)(1) of this section is due, the Notification of Compliance Status may be submitted in lieu of the Initial Notification provided it contains the information required under paragraph (a)(1) of this section.

(3) If, prior to January 10, 2008, you are operating in compliance with an enforceable State, local, or tribal rule or permit that requires submerged fill as specified in §63.11117(b), you are not required to submit an Initial Notification or a Notification of Compliance Status under paragraph (a)(1) or paragraph (a)(2) of this section.

(b) Each owner or operator subject to the control requirements in §63.11118 must comply with paragraphs (b)(1) through (5) of this section.

(1) You must submit an Initial Notification that you are subject to this subpart by May 9, 2008, or at the time you become subject to the control requirements in §63.11118. If your affected source is subject to the control requirements in §63.11118 only because it loads gasoline into fuel tanks other than those in motor vehicles, as defined in §63.11132, you must submit the Initial Notification by May 24, 2011. The Initial Notification must contain the information specified in paragraphs (b)(1)(i) through (iii) of this section. The notification must be submitted to the applicable EPA Regional Office and delegated State authority as specified in §63.13.

(i) The name and address of the owner and the operator.

(ii) The address (i.e., physical location) of the GDF.

(iii) A statement that the notification is being submitted in response to this subpart and identifying the requirements in paragraphs (a) through (c) of §63.11118 that apply to you.

(2) You must submit a Notification of Compliance Status to the applicable EPA Regional Office and the delegated State authority, as specified in §63.13, in accordance with the schedule specified in §63.9(h). The Notification of Compliance Status must be signed by a responsible official who must certify its accuracy, must indicate whether the source has complied with the requirements of this subpart, and must indicate whether the facility's throughput is determined based on the volume of gasoline loaded into all storage tanks or on the volume of gasoline dispensed from all storage tanks. If your facility is in compliance with the requirements of this subpart at the time the Initial Notification required under paragraph (b)(1) of this section is due, the Notification of Compliance Status may be submitted in lieu of the Initial Notification provided it contains the information required under paragraph (b)(1) of this section.

(3) If, prior to January 10, 2008, you satisfy the requirements in both paragraphs (b)(3)(i) and (ii) of this section, you are not required to submit an Initial Notification or a Notification of Compliance Status under paragraph (b)(1) or paragraph (b)(2) of this subsection.

(i) You operate a vapor balance system at your gasoline dispensing facility that meets the requirements of either paragraphs (b)(3)(i)(A) or (b)(3)(i)(B) of this section.

(A) Achieves emissions reduction of at least 90 percent.

(B) Operates using management practices at least as stringent as those in Table 1 to this subpart.

(ii) Your gasoline dispensing facility is in compliance with an enforceable State, local, or tribal rule or permit that contains requirements of either paragraphs (b)(3)(i)(A) or (b)(3)(i)(B) of this section.

(4) You must submit a Notification of Performance Test, as specified in §63.9(e), prior to initiating testing required by §63.11120(a) and (b).

(5) You must submit additional notifications specified in §63.9, as applicable.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 12276, Mar. 7, 2008; 76 FR 4182, Jan. 24, 2011]

§ 63.11125 What are my recordkeeping requirements?

(a) Each owner or operator subject to the management practices in §63.11118 must keep records of all tests performed under §63.11120(a) and (b).

(b) Records required under paragraph (a) of this section shall be kept for a period of 5 years and shall be made available for inspection by the Administrator's delegated representatives during the course of a site visit.

(c) Each owner or operator of a gasoline cargo tank subject to the management practices in Table 2 to this subpart must keep records documenting vapor tightness testing for a period of 5 years. Documentation must include each of the items specified in §63.11094(b)(2)(i) through (viii). Records of vapor tightness testing must be retained as specified in either paragraph (c)(1) or paragraph (c)(2) of this section.

(1) The owner or operator must keep all vapor tightness testing records with the cargo tank.

(2) As an alternative to keeping all records with the cargo tank, the owner or operator may comply with the requirements of paragraphs (c)(2)(i) and (ii) of this section.

(i) The owner or operator may keep records of only the most recent vapor tightness test with the cargo tank, and keep records for the previous 4 years at their office or another central location.

(ii) Vapor tightness testing records that are kept at a location other than with the cargo tank must be instantly available (e.g., via e-mail or facsimile) to the Administrator's delegated representative during the course of a site visit or within a mutually agreeable time frame. Such records must be an exact duplicate image of the original paper copy record with certifying signatures.

(d) Each owner or operator of an affected source under this subpart shall keep records as specified in paragraphs (d)(1) and (2) of this section.

(1) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

(2) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.11115(a), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4183, Jan. 24, 2011]

§ 63.11126 What are my reporting requirements?

(a) Each owner or operator subject to the management practices in §63.11118 shall report to the Administrator the results of all volumetric efficiency tests required under §63.11120(b). Reports submitted under this paragraph must be submitted within 180 days of the completion of the performance testing.

(b) Each owner or operator of an affected source under this subpart shall report, by March 15 of each year, the number, duration, and a brief description of each type of malfunction which occurred during the previous calendar year and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.11115(a), including actions taken to correct a malfunction. No report is necessary for a calendar year in which no malfunctions occurred.

[76 FR 4183, Jan. 24, 2011]

Other Requirements and Information

§ 63.11130 What parts of the General Provisions apply to me?

Table 3 to this subpart shows which parts of the General Provisions apply to you.

§ 63.11131 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by the U.S. EPA or a delegated authority such as the applicable State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. Contact the applicable U.S. EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to a State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of U.S. EPA and cannot be transferred to the State, local, or tribal agency.

(c) The authorities that cannot be delegated to State, local, or tribal agencies are as specified in paragraphs (c)(1) through (3) of this section.

(1) Approval of alternatives to the requirements in §§63.11116 through 63.11118 and 63.11120.

(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f), as defined in §63.90, and as required in this subpart.

(3) Approval of major alternatives to recordkeeping and reporting under §63.10(f), as defined in §63.90, and as required in this subpart.

§ 63.11132 What definitions apply to this subpart?

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act (CAA), or in subparts A and BBBB of this part. For purposes of this subpart, definitions in this section supersede definitions in other parts or subparts.

Dual-point vapor balance system means a type of vapor balance system in which the storage tank is equipped with an entry port for a gasoline fill pipe and a separate exit port for a vapor connection.

Gasoline means any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kilopascals or greater, which is used as a fuel for internal combustion engines.

Gasoline cargo tank means a delivery tank truck or railcar which is loading or unloading gasoline, or which has loaded or unloaded gasoline on the immediately previous load.

Gasoline dispensing facility (GDF) means any stationary facility which dispenses gasoline into the fuel tank of a motor vehicle, motor vehicle engine, nonroad vehicle, or nonroad engine, including a nonroad vehicle or nonroad engine used solely for competition. These facilities include, but are not limited to, facilities that dispense gasoline into on- and off-road, street, or highway motor vehicles, lawn equipment, boats, test engines, landscaping equipment, generators, pumps, and other gasoline-fueled engines and equipment.

Monthly throughput means the total volume of gasoline that is loaded into, or dispensed from, all gasoline storage tanks at each GDF during a month. Monthly throughput is calculated by summing the volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at each GDF during the current day, plus the total volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at each GDF during the previous 364 days, and then dividing that sum by 12.

Motor vehicle means any self-propelled vehicle designed for transporting persons or property on a street or highway.

Nonroad engine means an internal combustion engine (including the fuel system) that is not used in a motor vehicle or a vehicle used solely for competition, or that is not subject to standards promulgated under section 7411 of this title or section 7521 of this title.

Nonroad vehicle means a vehicle that is powered by a nonroad engine, and that is not a motor vehicle or a vehicle used solely for competition.

Submerged filling means, for the purposes of this subpart, the filling of a gasoline storage tank through a submerged fill pipe whose discharge is no more than the applicable distance specified in §63.11117(b) from the bottom of the tank. Bottom filling of gasoline storage tanks is included in this definition.

Vapor balance system means a combination of pipes and hoses that create a closed system between the vapor spaces of an unloading gasoline cargo tank and a receiving storage tank such that vapors displaced from the storage tank are transferred to the gasoline cargo tank being unloaded.

Vapor-tight means equipment that allows no loss of vapors. Compliance with vapor-tight requirements can be determined by checking to ensure that the concentration at a potential leak source is not equal to or greater than 100 percent of the Lower Explosive Limit when measured with a combustible gas detector, calibrated with propane, at a distance of 1 inch from the source.

Vapor-tight gasoline cargo tank means a gasoline cargo tank which has demonstrated within the 12 preceding months that it meets the annual certification test requirements in §63.11092(f) of this part.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4183, Jan. 24, 2011]

Table 1 to Subpart CCCCCC of Part 63—Applicability Criteria and Management Practices for Gasoline Dispensing Facilities With Monthly Throughput of 100,000 Gallons of Gasoline or More¹

If you own or operate	Then you must
1. A new, reconstructed, or existing GDF subject to §63.11118	Install and operate a vapor balance system on your gasoline storage tanks that meets the design criteria in paragraphs (a) through (h).
	(a) All vapor connections and lines on the storage tank shall be equipped with closures that seal upon disconnect.
	(b) The vapor line from the gasoline storage tank to the gasoline cargo tank shall be vapor-tight, as defined in §63.11132.
	(c) The vapor balance system shall be designed such that the pressure in the tank truck does not exceed 18 inches water pressure or 5.9 inches water vacuum during product transfer.
	(d) The vapor recovery and product adaptors, and the method of connection with the delivery elbow, shall be designed so as to prevent the over-tightening or loosening of fittings during normal delivery operations.
	(e) If a gauge well separate from the fill tube is used, it shall be provided with a submerged drop tube that extends the same distance from the bottom of the storage tank as specified in §63.11117(b).

	(f) Liquid fill connections for all systems shall be equipped with vapor-tight caps.
	(g) Pressure/vacuum (PV) vent valves shall be installed on the storage tank vent pipes. The pressure specifications for PV vent valves shall be: a positive pressure setting of 2.5 to 6.0 inches of water and a negative pressure setting of 6.0 to 10.0 inches of water. The total leak rate of all PV vent valves at an affected facility, including connections, shall not exceed 0.17 cubic foot per hour at a pressure of 2.0 inches of water and 0.63 cubic foot per hour at a vacuum of 4 inches of water.
	(h) The vapor balance system shall be capable of meeting the static pressure performance requirement of the following equation:
	$P_f = 2e^{-500.887/v}$
	Where:
	P_f = Minimum allowable final pressure, inches of water.
	v = Total ullage affected by the test, gallons.
	e = Dimensionless constant equal to approximately 2.718.
	2 = The initial pressure, inches water.
2. A new or reconstructed GDF, or any storage tank(s) constructed after November 9, 2006, at an existing affected facility subject to §63.11118	Equip your gasoline storage tanks with a dual-point vapor balance system, as defined in §63.11132, and comply with the requirements of item 1 in this Table.

¹The management practices specified in this Table are not applicable if you are complying with the requirements in §63.11118(b)(2), except that if you are complying with the requirements in §63.11118(b)(2)(i)(B), you must operate using management practices at least as stringent as those listed in this Table.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 35944, June 25, 2008; 76 FR 4184, Jan. 24, 2011]

Table 2 to Subpart CCCCCC of Part 63—Applicability Criteria and Management Practices for Gasoline Cargo Tanks Unloading at Gasoline Dispensing Facilities With Monthly Throughput of 100,000 Gallons of Gasoline or More

If you own or operate	Then you must
A gasoline cargo tank	Not unload gasoline into a storage tank at a GDF subject to the control requirements in this subpart unless the following conditions are met:

	(i) All hoses in the vapor balance system are properly connected,
	(ii) The adapters or couplers that attach to the vapor line on the storage tank have closures that seal upon disconnect,
	(iii) All vapor return hoses, couplers, and adapters used in the gasoline delivery are vapor-tight,
	(iv) All tank truck vapor return equipment is compatible in size and forms a vapor-tight connection with the vapor balance equipment on the GDF storage tank, and
	(v) All hatches on the tank truck are closed and securely fastened.
	(vi) The filling of storage tanks at GDF shall be limited to unloading from vapor-tight gasoline cargo tanks. Documentation that the cargo tank has met the specifications of EPA Method 27 shall be carried with the cargo tank, as specified in §63.11125(c).

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4184, Jan. 24, 2011]

Table 3 to Subpart CCCCCC of Part 63—Applicability of General Provisions

Citation	Subject	Brief description	Applies to subpart CCCCCC
§63.1	Applicability	Initial applicability determination; applicability after standard established; permit requirements; extensions, notifications	Yes, specific requirements given in §63.11111.
§63.1(c)(2)	Title V Permit	Requirements for obtaining a title V permit from the applicable permitting authority	Yes, §63.11111(f) of subpart CCCCCC exempts identified area sources from the obligation to obtain title V operating permits.
§63.2	Definitions	Definitions for part 63 standards	Yes, additional definitions in §63.11132.

§63.3	Units and Abbreviations	Units and abbreviations for part 63 standards	Yes.
§63.4	Prohibited Activities and Circumvention	Prohibited activities; Circumvention, severability	Yes.
§63.5	Construction/Reconstruction	Applicability; applications; approvals	Yes, except that these notifications are not required for facilities subject to §63.11116
§63.6(a)	Compliance with Standards/Operation & Maintenance—Applicability	General Provisions apply unless compliance extension; General Provisions apply to area sources that become major	Yes.
§63.6(b)(1)–(4)	Compliance Dates for New and Reconstructed Sources	Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for CAA section 112(f)	Yes.
§63.6(b)(5)	Notification	Must notify if commenced construction or reconstruction after proposal	Yes.
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance Dates for New and Reconstructed Area Sources That Become Major	Area sources that become major must comply with major source standards immediately upon becoming major, regardless of whether required to comply when they were an area source	No.
§63.6(c)(1)–(2)	Compliance Dates for Existing Sources	Comply according to date in this subpart, which must be no later than 3 years after effective date; for CAA section 112(f)	No, §63.11113 specifies the compliance dates.

		standards, comply within 90 days of effective date unless compliance extension	
§63.6(c)(3)–(4)	[Reserved]		
§63.6(c)(5)	Compliance Dates for Existing Area Sources That Become Major	Area sources That become major must comply with major source standards by date indicated in this subpart or by equivalent time period (e.g., 3 years)	No.
§63.6(d)	[Reserved]		
63.6(e)(1)(i)	General duty to minimize emissions	Operate to minimize emissions at all times; information Administrator will use to determine if operation and maintenance requirements were met.	No. <i>See</i> §63.11115 for general duty requirement.
63.6(e)(1)(ii)	Requirement to correct malfunctions ASAP	Owner or operator must correct malfunctions as soon as possible.	No.
§63.6(e)(2)	[Reserved]		
§63.6(e)(3)	Startup, Shutdown, and Malfunction (SSM) Plan	Requirement for SSM plan; content of SSM plan; actions during SSM	No.
§63.6(f)(1)	Compliance Except During SSM	You must comply with emission standards at all times except during SSM	No.
§63.6(f)(2)–(3)	Methods for Determining Compliance	Compliance based on performance test, operation and maintenance plans, records, inspection	Yes.
§63.6(g)(1)–(3)	Alternative Standard	Procedures for getting an alternative standard	Yes.
§63.6(h)(1)	Compliance with Opacity/Visible Emission (VE) Standards	You must comply with opacity/VE standards at all times except during SSM	No.
§63.6(h)(2)(i)	Determining Compliance with Opacity/VE Standards	If standard does not State test method, use EPA	No.

		Method 9 for opacity in appendix A of part 60 of this chapter and EPA Method 22 for VE in appendix A of part 60 of this chapter	
§63.6(h)(2)(ii)	[Reserved]		
§63.6(h)(2)(iii)	Using Previous Tests To Demonstrate Compliance With Opacity/VE Standards	Criteria for when previous opacity/VE testing can be used to show compliance with this subpart	No.
§63.6(h)(3)	[Reserved]		
§63.6(h)(4)	Notification of Opacity/VE Observation Date	Must notify Administrator of anticipated date of observation	No.
§63.6(h)(5)(i), (iii)–(v)	Conducting Opacity/VE Observations	Dates and schedule for conducting opacity/VE observations	No.
§63.6(h)(5)(ii)	Opacity Test Duration and Averaging Times	Must have at least 3 hours of observation with 30 6-minute averages	No.
§63.6(h)(6)	Records of Conditions During Opacity/VE Observations	Must keep records available and allow Administrator to inspect	No.
§63.6(h)(7)(i)	Report Continuous Opacity Monitoring System (COMS) Monitoring Data From Performance Test	Must submit COMS data with other performance test data	No.
§63.6(h)(7)(ii)	Using COMS Instead of EPA Method 9	Can submit COMS data instead of EPA Method 9 results even if rule requires EPA Method 9 in appendix A of part 60 of this chapter, but must notify Administrator before performance test	No.
§63.6(h)(7)(iii)	Averaging Time for COMS During Performance Test	To determine compliance, must reduce COMS data to 6-minute averages	No.

§63.6(h)(7)(iv)	COMS Requirements	Owner/operator must demonstrate that COMS performance evaluations are conducted according to §63.8(e); COMS are properly maintained and operated according to §63.8(c) and data quality as §63.8(d)	No.
§63.6(h)(7)(v)	Determining Compliance with Opacity/VE Standards	COMS is probable but not conclusive evidence of compliance with opacity standard, even if EPA Method 9 observation shows otherwise. Requirements for COMS to be probable evidence-proper maintenance, meeting Performance Specification 1 in appendix B of part 60 of this chapter, and data have not been altered	No.
§63.6(h)(8)	Determining Compliance with Opacity/VE Standards	Administrator will use all COMS, EPA Method 9 (in appendix A of part 60 of this chapter), and EPA Method 22 (in appendix A of part 60 of this chapter) results, as well as information about operation and maintenance to determine compliance	No.
§63.6(h)(9)	Adjusted Opacity Standard	Procedures for Administrator to adjust an opacity standard	No.
§63.6(i)(1)–(14)	Compliance Extension	Procedures and criteria for Administrator to grant compliance extension	Yes.
§63.6(j)	Presidential Compliance Exemption	President may exempt any source from requirement to comply with this subpart	Yes.

§63.7(a)(2)	Performance Test Dates	Dates for conducting initial performance testing; must conduct 180 days after compliance date	Yes.
§63.7(a)(3)	CAA Section 114 Authority	Administrator may require a performance test under CAA section 114 at any time	Yes.
§63.7(b)(1)	Notification of Performance Test	Must notify Administrator 60 days before the test	Yes.
§63.7(b)(2)	Notification of Re-scheduling	If have to reschedule performance test, must notify Administrator of rescheduled date as soon as practicable and without delay	Yes.
§63.7(c)	Quality Assurance (QA)/Test Plan	Requirement to submit site-specific test plan 60 days before the test or on date Administrator agrees with; test plan approval procedures; performance audit requirements; internal and external QA procedures for testing	Yes.
§63.7(d)	Testing Facilities	Requirements for testing facilities	Yes.
63.7(e)(1)	Conditions for Conducting Performance Tests	Performance test must be conducted under representative conditions	No, §63.11120(c) specifies conditions for conducting performance tests.
§63.7(e)(2)	Conditions for Conducting Performance Tests	Must conduct according to this subpart and EPA test methods unless Administrator approves alternative	Yes.
§63.7(e)(3)	Test Run Duration	Must have three test runs of at least 1 hour each;	Yes.

		compliance is based on arithmetic mean of three runs; conditions when data from an additional test run can be used	
§63.7(f)	Alternative Test Method	Procedures by which Administrator can grant approval to use an intermediate or major change, or alternative to a test method	Yes.
§63.7(g)	Performance Test Data Analysis	Must include raw data in performance test report; must submit performance test data 60 days after end of test with the Notification of Compliance Status; keep data for 5 years	Yes.
§63.7(h)	Waiver of Tests	Procedures for Administrator to waive performance test	Yes.
§63.8(a)(1)	Applicability of Monitoring Requirements	Subject to all monitoring requirements in standard	Yes.
§63.8(a)(2)	Performance Specifications	Performance Specifications in appendix B of 40 CFR part 60 apply	Yes.
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring of Flares	Monitoring requirements for flares in §63.11 apply	Yes.
§63.8(b)(1)	Monitoring	Must conduct monitoring according to standard unless Administrator approves alternative	Yes.
§63.8(b)(2)–(3)	Multiple Effluents and Multiple Monitoring Systems	Specific requirements for installing monitoring systems; must install on each affected source or after combined with another affected source before it is released to the atmosphere provided the	No.

		monitoring is sufficient to demonstrate compliance with the standard; if more than one monitoring system on an emission point, must report all monitoring system results, unless one monitoring system is a backup	
§63.8(c)(1)	Monitoring System Operation and Maintenance	Maintain monitoring system in a manner consistent with good air pollution control practices	No.
§63.8(c)(1)(i)–(iii)	Operation and Maintenance of Continuous Monitoring Systems (CMS)	Must maintain and operate each CMS as specified in §63.6(e)(1); must keep parts for routine repairs readily available; must develop a written SSM plan for CMS, as specified in §63.6(e)(3)	No.
§63.8(c)(2)–(8)	CMS Requirements	Must install to get representative emission or parameter measurements; must verify operational status before or at performance test	No.
§63.8(d)	CMS Quality Control	Requirements for CMS quality control, including calibration, etc.; must keep quality control plan on record for 5 years; keep old versions for 5 years after revisions	No.
§63.8(e)	CMS Performance Evaluation	Notification, performance evaluation test plan, reports	No.
§63.8(f)(1)–(5)	Alternative Monitoring Method	Procedures for Administrator to approve alternative monitoring	No.
§63.8(f)(6)	Alternative to Relative Accuracy Test	Procedures for Administrator to approve alternative relative accuracy	No.

		tests for continuous emissions monitoring system (CEMS)	
§63.8(g)	Data Reduction	COMS 6-minute averages calculated over at least 36 evenly spaced data points; CEMS 1 hour averages computed over at least 4 equally spaced data points; data that cannot be used in average	No.
§63.9(a)	Notification Requirements	Applicability and State delegation	Yes.
§63.9(b)(1)–(2), (4)–(5)	Initial Notifications	Submit notification within 120 days after effective date; notification of intent to construct/reconstruct, notification of commencement of construction/reconstruction, notification of startup; contents of each	Yes.
§63.9(c)	Request for Compliance Extension	Can request if cannot comply by date or if installed best available control technology or lowest achievable emission rate	Yes.
§63.9(d)	Notification of Special Compliance Requirements for New Sources	For sources that commence construction between proposal and promulgation and want to comply 3 years after effective date	Yes.
§63.9(e)	Notification of Performance Test	Notify Administrator 60 days prior	Yes.
§63.9(f)	Notification of VE/Opacity Test	Notify Administrator 30 days prior	No.
§63.9(g)	Additional Notifications when Using CMS	Notification of performance evaluation; notification about use of COMS data; notification that exceeded	Yes, however, there are no opacity standards.

		criterion for relative accuracy alternative	
§63.9(h)(1)–(6)	Notification of Compliance Status	Contents due 60 days after end of performance test or other compliance demonstration, except for opacity/VE, which are due 30 days after; when to submit to Federal vs. State authority	Yes, however, there are no opacity standards.
§63.9(i)	Adjustment of Submittal Deadlines	Procedures for Administrator to approve change when notifications must be submitted	Yes.
§63.9(j)	Change in Previous Information	Must submit within 15 days after the change	Yes.
§63.10(a)	Recordkeeping/Reporting	Applies to all, unless compliance extension; when to submit to Federal vs. State authority; procedures for owners of more than one source	Yes.
§63.10(b)(1)	Recordkeeping/Reporting	General requirements; keep all records readily available; keep for 5 years	Yes.
§63.10(b)(2)(i)	Records related to SSM	Recordkeeping of occurrence and duration of startups and shutdowns	No.
§63.10(b)(2)(ii)	Records related to SSM	Recordkeeping of malfunctions	No. <i>See</i> §63.11125(d) for recordkeeping of (1) occurrence and duration and (2) actions taken during malfunction.
§63.10(b)(2)(iii)	Maintenance records	Recordkeeping of maintenance on air	Yes.

		pollution control and monitoring equipment	
§63.10(b)(2)(iv)	Records Related to SSM	Actions taken to minimize emissions during SSM	No.
§63.10(b)(2)(v)	Records Related to SSM	Actions taken to minimize emissions during SSM	No.
§63.10(b)(2)(vi)–(xi)	CMS Records	Malfunctions, inoperative, out-of-control periods	No.
§63.10(b)(2)(xii)	Records	Records when under waiver	Yes.
§63.10(b)(2)(xiii)	Records	Records when using alternative to relative accuracy test	Yes.
§63.10(b)(2)(xiv)	Records	All documentation supporting Initial Notification and Notification of Compliance Status	Yes.
§63.10(b)(3)	Records	Applicability determinations	Yes.
§63.10(c)	Records	Additional records for CMS	No.
§63.10(d)(1)	General Reporting Requirements	Requirement to report	Yes.
§63.10(d)(2)	Report of Performance Test Results	When to submit to Federal or State authority	Yes.
§63.10(d)(3)	Reporting Opacity or VE Observations	What to report and when	No.
§63.10(d)(4)	Progress Reports	Must submit progress reports on schedule if under compliance extension	Yes.
§63.10(d)(5)	SSM Reports	Contents and submission	No. <i>See</i> §63.11126(b) for malfunction reporting requirements.
§63.10(e)(1)–(2)	Additional CMS Reports	Must report results for each CEMS on a unit; written copy of CMS performance	No.

		evaluation; two-three copies of COMS performance evaluation	
§63.10(e)(3)(i)–(iii)	Reports	Schedule for reporting excess emissions	No.
§63.10(e)(3)(iv)–(v)	Excess Emissions Reports	Requirement to revert to quarterly submission if there is an excess emissions and parameter monitor exceedances (now defined as deviations); provision to request semiannual reporting after compliance for 1 year; submit report by 30th day following end of quarter or calendar half; if there has not been an exceedance or excess emissions (now defined as deviations), report contents in a statement that there have been no deviations; must submit report containing all of the information in §§63.8(c)(7)–(8) and 63.10(c)(5)–(13)	No.
§63.10(e)(3)(iv)–(v)	Excess Emissions Reports	Requirement to revert to quarterly submission if there is an excess emissions and parameter monitor exceedances (now defined as deviations); provision to request semiannual reporting after compliance for 1 year; submit report by 30th day following end of quarter or calendar half; if there has not been an exceedance or excess emissions (now defined as deviations), report contents in a statement that there have been no deviations;	No, §63.11130(K) specifies excess emission events for this subpart.

		must submit report containing all of the information in §§63.8(c)(7)–(8) and 63.10(c)(5)–(13)	
§63.10(e)(3)(vi)–(viii)	Excess Emissions Report and Summary Report	Requirements for reporting excess emissions for CMS; requires all of the information in §§63.10(c)(5)–(13) and 63.8(c)(7)–(8)	No.
§63.10(e)(4)	Reporting COMS Data	Must submit COMS data with performance test data	No.
§63.10(f)	Waiver for Recordkeeping/Reporting	Procedures for Administrator to waive	Yes.
§63.11(b)	Flares	Requirements for flares	No.
§63.12	Delegation	State authority to enforce standards	Yes.
§63.13	Addresses	Addresses where reports, notifications, and requests are sent	Yes.
§63.14	Incorporations by Reference	Test methods incorporated by reference	Yes.
§63.15	Availability of Information	Public and confidential information	Yes.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4184, Jan. 24, 2011]

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Minor Source Operating Permit (MSOP) with New Source Review

Source Description and Location

Source Name:	Camp Atterbury Joint Maneuver Training Center
Source Location:	3008 Hospital Road, Edinburgh, IN 46124
County:	Bartholomew, Brown, and Johnson
SIC Code:	9711 (National Security)
Operation Permit No.:	M081-31782-00042
Permit Reviewer:	Deena Patton

On April 27, 2012, the Office of Air Quality (OAQ) received an application from Camp Atterbury Joint Maneuver Training Center related to the continued operation of an existing designated mobilization and training site for the National Guard and U.S. Army Reserve.

Existing Approvals

The source was initially constructed and has been operating under Construction Permit No. CP-081-7065-00042, issued on August 22, 1997.

County Attainment Status

The source is located in Bartholomew, Brown, and Johnson Counties. Below are tables summarizing the county attainment status for each of these counties.

Bartholomew County	
Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.
¹ Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. Unclassifiable or attainment effective April 5, 2005, for PM _{2.5} .	

Brown County	
Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.
¹ Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. Unclassifiable or attainment effective April 5, 2005, for PM _{2.5} .	

Johnson County	
Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Attainment effective October 19, 2007, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.
¹ Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. Basic nonattainment designation effective federally April 5, 2005, for PM _{2.5} .	

- (a) **Ozone Standards**
 Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Bartholomew, Brown, and Johnson Counties has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

- (b) **PM_{2.5}**
 U.S. EPA, in the Federal Register Notice 70 FR 943 dated January 5, 2005, has designated Johnson County as nonattainment for PM_{2.5}. On March 7, 2005 the Indiana Attorney General's Office, on behalf of IDEM, filed a lawsuit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of nonattainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for a violation of the Clean Air Act, the OAQ is following the U.S. EPA's New Source Review Rule for PM_{2.5} promulgated on May 8, 2008. These rules became effective on July 15, 2008. Therefore, direct PM_{2.5} and SO₂ emissions were reviewed pursuant to the requirements of Nonattainment New Source Review, 326 IAC 2-1.1-5. See the State Rule Applicability – Entire Source section.

Bartholomew and Brown Counties have been classified as attainment for PM_{2.5}. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM_{2.5} emissions. These rules became effective on July 15, 2008. On May 4, 2011 the air pollution control board issued an emergency rule establishing the direct PM_{2.5} significant level at ten (10) tons per year. This rule became effective, June 28, 2011. Therefore, direct PM_{2.5} and SO₂ emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.

- (c) **Other Criteria Pollutants**
 Bartholomew, Brown, and Johnson Counties has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

- (a) The fugitive emissions of criteria pollutants and hazardous air pollutants are counted toward the determination of 326 IAC 2-6.1 (Minor Source Operating Permits) applicability.
- (b) Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Background and Description of Emission Units and Pollution Control Equipment

The Office of Air Quality (OAQ) has reviewed an application, submitted by Camp Atterbury Joint Maneuver Training Center on April 27, 2012, relating to the continued operation of an existing designated mobilization and training site for the National Guard and U.S. Army Reserve.

The source consists of the following permitted emission units:

- (a) Abrasive blasting gloveboxes, used for cleaning automobile parts during equipment maintenance and repair and for paint removal and preparing equipment for spot welding, consisting of:
 - (1) Building 627 abrasive blasting glovebox, identified as AB03, constructed in 1997, with a maximum capacity of 25 pounds of boiler slag per year, using filter bags as controls.
 - (2) Building 630 abrasive blasting glovebox, identified as AB04, constructed in 1997, with a maximum capacity of 25 pounds of boiler slag per year, using filter bags as controls.
 - (3) Building 633 abrasive blasting glovebox, identified as AB05, constructed in 1997, with a maximum capacity of 20 pounds of boiler slag per year, using filter bags as controls.
- (b) Degreasing operations, used to clean weapons following range qualification and automotive parts, consisting of:
 - (1) Building 630 System One parts washer degreaser, identified as DG02, constructed in 1997, with a maximum capacity of 30 gallons and maximum usage of 10.00 gallons per year.
- (c) Two (2) closed landfills, including:
 - (1) Landfill 01, a closed landfill that accepted municipal solid waste from 1971 to 1993, containing 987,529 cubic meters of waste, and exhausting to landfill vents. This landfill has a design capacity less than 2.5 million megagrams (Mg) of waste.
 - (2) Landfill 02, a closed landfill that accepted construction waste from 1953 to 1970, containing 20 acres of waste, with no landfill vents, and exhausting fugitive emissions to the atmosphere. This landfill has a design capacity less than 2.5 million megagrams (Mg) of waste.

Landfill 01 and 02 are considered affected facilities under New Source Performance Standards for Emission Compliance Times for Municipal Solid Waste Landfills (40 CFR 60, Subpart Cc)
- (d) Surface coating operations, including:
 - (1) Building 630 paint spray booth, identified as PSB01, conducting manual and spray painting touch-up of vehicles, constructed in 1997, with a maximum capacity of 1.0 gallon per week, with a filter wall for particulate control, exhausting to stacks S630a and S630b.
- (e) Vehicle fuel dispensing tanks, including:
 - (1) Three (3) UST vehicle fuel dispensing operations, identified as VFD01, VFD02, and VFD03, constructed in 1991, each has a storage capacity of less than 39,000 gallons of jet fuel (JP8), with a combined maximum throughput of 675,080 gallons per year.
 - (2) One (1) UST gasoline dispensing operation, identified as VFD04, constructed in 1991, has a storage capacity of less than 39,000 gallons, with a maximum throughput of 159,019 gallons per year.

VFD04 is considered an affected facility under National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Category: Gasoline Dispensing Facilities (40 CFR 63, Subpart CCCCCC).

- (3) One (1) AST fuel dispensing operation, identified as VFD05, constructed in 1997, with a maximum storage capacity of 1,000 gallons of off-spec JP8 or gasoline.
- (f) Used oil storage tanks, including:
 - (1) Used Oil Storage tanks UOil03 and UOil04, constructed in 1990, each with a storage capacity of 1,000 gallons, with a combined maximum throughput of 1,450 gallons per year.
 - (2) Used Oil Storage tank UOil05, constructed in 1990, with a storage capacity of 1,000 gallons and a maximum throughput of 850 gallons per year.
- (g) Welding and torch cutting operations, including:
 - (1) Building 711 oxyacetylene torch, identified as WEL30, constructed in 1990, with a maximum capacity of 1.0 foot per minute.
 - (2) Building T0801 oxyacetylene torch, identified as WEL31, constructed in 1990, with a maximum capacity of 1.0 foot per minute.
 - (3) Building 123 MIG welder, identified as WEL32, constructed in 1992, with a maximum capacity of 5.20 pounds per year.
 - (4) Building 123 oxyacetylene torch, identified as WEL33, constructed in 1996, with a maximum capacity of 1.0 foot per minute.

The following is a list of the new emission unit:

- (5) Building 250 oxyacetylene torch, identified as WEL34, approved for construction in 2013, with a maximum capacity of 1.0 foot per minute.

Unpermitted Emission Units and Pollution Control Equipment

The source consists of the following unpermitted emission units:

- (a) Abrasive blasting gloveboxes, used for cleaning automobile parts during equipment maintenance and repair and for paint removal and preparing equipment for spot welding, consisting of:
 - (1) Building 123 abrasive blasting glovebox, identified as AB01, constructed in 2000, with a maximum capacity of 20 pounds of glass bead per year, using filter bags as controls.
 - (2) Building 232 abrasive blasting glovebox, identified as AB02, constructed in 2010, with a maximum capacity of 17 pounds of steel grit per year, using filter bags as controls.
- (b) Degreasing operations, used to clean weapons following range qualification and automotive parts, consisting of:
 - (1) Building 124 degreaser, identified as DG01, constructed in 2000, with a maximum capacity of 35 gallons and maximum usage of 11.7 gallons per year.
 - (2) Building 630 Recycle-Kleen parts washer degreaser, identified as DG03, constructed in 2010, with a maximum capacity of 20 gallons and a maximum usage of 6.70 gallons per year.

- (3) Building 630 Zep solvent recycler degreaser, identified as DG04, constructed in 2002, with a maximum capacity of 5 gallons and a maximum usage of 1.70 gallons per year.
 - (4) Building 633 Inland Technology degreaser, identified as DG05, constructed in 1998, with a maximum capacity of 55 gallons and a maximum usage of 18.30 gallons per year.
 - (5) Building 633 Recycle-Kleen parts washer degreaser, identified as DG06, constructed in 2012, with a maximum capacity of 20 gallons and a maximum usage of 6.70 gallons per year.
 - (6) Building 633 Zep degreaser, identified as DG07, constructed in 2010, with a maximum capacity of 45 gallons and a maximum usage of 15.00 gallons per year.
 - (7) Building 655 Inland Technology degreaser, identified as DG08, constructed in 2011, with a maximum capacity of 5 gallons and a maximum usage of 1.70 gallons per year.
 - (8) Building 710 Zep degreaser, identified as DG09, constructed in 2010, with a maximum capacity of 45 gallons and a maximum usage of 15.00 gallons per year.
 - (9) Building 10411 Inland Technology degreaser, identified as DG10, constructed in 2002, with a maximum capacity of 20 gallons and a maximum usage of 6.70 gallons per year.
 - (10) Building 12411 Inland Technology degreaser, identified as DG11, constructed in 2002, with a maximum capacity of 20 gallons and a maximum usage of 6.70 gallons per year.
 - (11) Building 14112 Inland Technology degreaser, identified as DG12, constructed in 2002, with a maximum capacity of 20 gallons and a maximum usage of 6.70 gallons per year.
 - (12) Building 18411 Inland Technology degreaser, identified as DG13, constructed in 2002, with a maximum capacity of 20 gallons and a maximum usage of 6.70 gallons per year.
 - (13) Building 21113 Inland Technology degreaser, identified as DG14, constructed in 2002, with a maximum capacity of 20 gallons and a maximum usage of 6.70 gallons per year.
 - (14) Building T0808 degreaser, identified as DG15, constructed in 2008, with a maximum capacity of 7 gallons and a maximum usage of 2.30 gallons per year.
- (c) Emergency generators, including:
- (1) Building 610 jet fuel-fired emergency generator, identified as GEN01, manufactured in 1974, installed in 2004, with a maximum heat input capacity of 80.4 HP.
 - (2) Building 40174 jet fuel-fired emergency generator, identified as GEN02, manufactured in 1983, installed in 2009, with a maximum heat input capacity of 80.4 HP.
 - (3) Building 2 jet fuel-fired emergency generator, identified as GEN03, manufactured in 1999, installed in 2010, with a maximum heat input capacity of 107.3 HP.
 - (4) Building 1 jet fuel-fired emergency generator, identified as GEN04, manufactured in 1999, installed in 2010, with a maximum heat input capacity of 107.3 HP.
 - (5) Building 225 jet fuel-fired emergency generator, identified as GEN05, manufactured in 1999, installed in 2010, with a maximum heat input capacity of 107.3 HP.
 - (6) Building 26411 propane-fired emergency generator, identified as GEN06, manufactured in 2011, installed in 2011, with a maximum heat input capacity of 40.2 HP.

GEN06 is considered an affected facility under New Source Performance Standards for Stationary Spark Ignition Internal Combustion Engines (40 CFR 60, Subpart JJJJ)

- (7) Building 7 jet fuel-fired emergency generator, identified as GEN07, manufactured after April 1, 2006, installed in 2011, with a maximum heat input capacity of 134.1 HP.
- (8) Building 433 natural gas-fired emergency generator, identified as GEN08, manufactured in February 2007, installed in 2011, with a maximum heat input capacity of 9.4 HP.
- (9) Building 343 natural gas-fired emergency generator, identified as GEN09, manufactured in March 2008, installed in 2011, with a maximum heat input capacity of 9.4 HP.
- (10) Building 7 jet fuel-fired emergency generator, identified as GEN10, manufactured in June 2002, installed in 2011, with a maximum heat input capacity of 67.1 HP.
- (11) Building 40180 natural gas-fired emergency generator, identified as GEN11, manufactured in October 2005, installed in 2011, with a maximum heat input capacity of 80.4 HP.
- (12) Building 3 jet fuel-fired emergency generator, identified as GEN12, manufactured after April 1, 2006, installed in 2011, with a maximum heat input capacity of 134.1 HP.
- (13) Building 127 jet fuel-fired emergency generator, identified as GEN13, manufactured after April 1, 2006, installed in 2011, with a maximum heat input capacity of 134.1 HP.
- (14) Building 40174 jet fuel-fired emergency generator, identified as GEN14, manufactured in June 2010, installed in 2010, with a maximum heat input capacity of 67.1 HP.
- (15) East Water Tower Building jet fuel-fired emergency generator, identified as GEN15, manufactured prior to 2005, installed in 2005, with a maximum heat input capacity of 26.8 HP.
- (16) Building 40134 jet fuel-fired emergency generator, identified as GEN16, manufactured after April 1, 2006, installed in 2011, with a maximum heat input capacity of 80.4 HP.
- (17) Building 40203 jet fuel-fired emergency generator, identified as GEN17, manufactured after April 1, 2006, installed in 2009, with a maximum heat input capacity of 80.4 HP.

GEN07, GEN12, GEN13, GEN14, GEN16 and GEN17 are considered affected facilities under New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines (40 CFR 60, Subpart IIII).

GEN02 through GEN05, GEN07, GEN06, GEN08, GEN09, GEN10, GEN11, GEN12 through GEN14, GEN16 and GEN17 are considered new affected facilities under the 40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants (NESHAP).

(d) Surface coating operations, including:

- (1) Building 232 open front bench booth, identified as PH01, constructed in 2010, with a maximum capacity of 0.50 gallon per week, painting small items such as doors and plaques, utilizing a paint hood with filters for particulate control, exhausting to stack S232a.

(e) Vehicle fuel dispensing tanks, including:

- (1) One (1) AST JP8 dispensing operation, identified as VFD06, constructed in 2011, with a maximum storage capacity of 750 gallons, with a maximum throughput of 750 gallons per year.
 - (2) One (1) AST gasoline dispensing operation, identified as VFD07, constructed in 2011, with a maximum capacity of 250 gallons, with a maximum throughput of 250 gallons per year.

VFD07 is considered an affected facility under National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Category: Gasoline Dispensing Facilities (40 CFR 63, Subpart CCCCCC).
 - (3) One (1) AST JP8 dispensing operation, identified as VFD08, constructed in 2007, has a storage capacity of less than 39,000 gallons with a maximum throughput of 12,198 gallons per year.
- (f) Used oil storage tanks, including:
- (1) Used oil storage tanks UOil01 and UOil02, constructed in 2009, each with a storage capacity of 500 gallons, with a combined maximum throughput of 3,300 gallons per year.
- (g) Welding and torch cutting operations, including:
- (1) Building 121 electric arc welder, identified as WEL01, constructed in 1999, with a maximum capacity of 0.70 pounds per year.
 - (2) Building 124 MIG welder, identified as WEL02, constructed after 1997, with a maximum capacity of 7.80 pounds per year.
 - (3) Building 232 electric arc welder, identified as WEL03, constructed in 2004, with a maximum capacity of 3.60 pounds per year.
 - (4) Building 232 MIG welder, identified as WEL04, constructed in 2004, with a maximum capacity of 3.60 pounds per year.
 - (5) Building 510 MIG welder, identified as WEL05, constructed in 2006, with a maximum capacity of 7.80 pounds per year.
 - (6) Building 624 MIG welder, identified as WEL06, constructed in 2003, with a maximum capacity of 7.80 pounds per year.
 - (7) Building 625 MIG welder, identified as WEL07, constructed in 2005, with a maximum capacity of 20.80 pounds per year.
 - (8) Building 627 MIG welder, identified as WEL08, constructed in 2011, with a maximum capacity of 10.40 pounds per year.
 - (9) Building 630 MIG welder, identified as WEL09, constructed in 2008, with a maximum capacity of 20.80 pounds per year.
 - (10) Building 630 MIG welder, identified as WEL10, constructed in 2004, with a maximum capacity of 2.10 pounds per year.
 - (11) Building 633 MIG welder, identified as WEL11, constructed in 2005, with a maximum capacity of 5.20 pounds per year.

- (12) Building 633 stick welder, identified as WEL12, constructed in 2011, with a maximum capacity of 2.60 pounds per year.
- (13) Building 655 MIG welder, identified as WEL13, constructed in 2011, with a maximum capacity of 7.80 pounds per year.
- (14) Building 711 MIG welder, identified as WEL14, constructed in 2008, with a maximum capacity of 7.80 pounds per year.
- (15) Building 40134 stick welder, identified as WEL15, constructed in 2011, with a maximum capacity of 0.50 pounds per year.
- (16) Building 232 oxyacetylene torch, identified as WEL16, constructed in 2010, with a maximum capacity of 1.0 foot per minute.
- (17) Building 232 oxyacetylene torch, identified as WEL17, constructed in 2010, with a maximum capacity of 1.0 foot per minute.
- (18) Building 232 plasma cutter, identified as WEL18, constructed in 2009, with a maximum capacity of 0.30 foot per minute.
- (19) Building 510 oxyacetylene torch, identified as WEL19, constructed after 1997, with a maximum capacity of 1.0 foot per minute.
- (20) Building 624 plasma cutter, identified as WEL20, constructed in 2009, with a maximum capacity of 0.20 foot per minute.
- (21) Building 624 oxyacetylene torch, identified as WEL21, constructed in 2009, with a maximum capacity of 1.0 foot per minute.
- (22) Building 625 plasma cutter, identified as WEL22, constructed in 2005, with a maximum capacity of 0.20 foot per minute.
- (23) Building 625 oxyacetylene torch, identified as WEL23, constructed in 2005, with a maximum capacity of 1.0 foot per minute.
- (24) Building 627 oxyacetylene torch, identified as WEL24, constructed after 1997, with a maximum capacity of 1.0 foot per minute.
- (25) Building 630 plasma cutter, identified as WEL25, constructed in 2003, with a maximum capacity of 0.20 foot per minute.
- (26) Building 630 oxyacetylene torch, identified as WEL26, constructed after 1997, with a maximum capacity of 1.0 foot per minute.
- (27) Building 633 oxyacetylene torch, identified as WEL27, constructed after 1997, with a maximum capacity of 1.0 foot per minute.
- (28) Building 655 oxyacetylene torch, identified as WEL28, constructed in 2011, with a maximum capacity of 1.0 foot per minute.
- (29) Building 711 plasma torch, identified as WEL29, constructed in 2005, with a maximum capacity of 0.20 foot per minute.
- (h) Twelve (12) natural gas-fired boilers with a combined maximum heat input capacity of 14.84 MMBtu per hour, with maximum capacities ranging from 0.3 to 1.01 MMBtu/hour, constructed from 1996 to 2009.

- (i) Four hundred and eighty-one (481) natural gas-fired heaters, constructed after 1997, with a combined maximum heat input capacity of 66.65 MMBtu per hour, with maximum capacity ranging from 0.01 to 0.99 MMBtu/hour.
- (j) One hundred and twelve (112) propane heaters, constructed after 1997, with a total maximum heat input capacity of up to 23.157 million British thermal units per hour (MMBtu/hr), where each individual combustion source has a heat input of less than 10 MMBtu/hr.

Enforcement Issues

Camp Atterbury Joint Maneuver Training Center was issued a Construction Permit (CP) No. 081-7065-00042 on August 22, 1997, for a container reconditioning facility. Pursuant to 326 IAC 2-6.1-3, the source was required to apply for MSOP by June 22, 2002 (90 days prior to the expiration date of September 22, 2002). On April 27, 2012, IDEM, OAQ received an application from Camp Atterbury Joint Maneuver Training Center.

IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. IDEM is reviewing this matter and will take the appropriate action. This proposed approval is intended to satisfy the requirements of the construction permit rules.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

Permit Level Determination – MSOP

The following table reflects the unlimited potential to emit (PTE) of the entire source before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	4.17
PM10 ⁽¹⁾	6.72
PM2.5	6.72
SO ₂	0.88
NO _x	59.34
VOC	16.00
CO	40.71
GHGs as CO ₂ e	66,648

- (1) Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".

HAPs	Potential To Emit (tons/year)
Worst Single HAP	0.66 (hexane)
TOTAL HAPs	1.33

- (a) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1) of NO_x and CO are each less than one hundred (100) tons per year, but greater than or equal to twenty-five (25) tons per year. The PTE of all other regulated criteria pollutants are less than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1. A Minor Source Operating Permit (MSOP) will be issued.

- (b) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1) of any single HAP is less than ten (10) tons per year and the PTE of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-7.
- (c) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1) greenhouse gases (GHGs) is less than the Title V subject to regulation threshold of one hundred thousand (100,000) tons of CO₂ equivalent emissions (CO₂e) per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.
- (d) This source has the potential to emit 1,287 tons of biogenic CO₂ per year. On July 20, 2011 U.S. EPA issued a deferral of Biogenic CO₂ emissions from PSD and Title V. Therefore, these CO₂ emissions were not included in the listed GHG emissions.

As specified in the Federal Register 76 FR 43493, July 20, 2011, biogenic CO₂ emissions are defined as emissions of CO₂ from a stationary source directly resulting from the combustion or decomposition of biologically-based materials other than fossil fuels and mineral sources of carbon. Examples of "biogenic CO₂ emissions" include, but are not limited to:

- (1) CO₂ generated from the biological decomposition of waste in landfills, wastewater treatment or manure management processes;
- (2) CO₂ from the combustion of biogas collected from biological decomposition of waste in landfills, wastewater treatment or manure management processes;

This deferral applies only to biogenic CO₂ emissions and does not affect non-GHG pollutants or other GHGs (e.g., methane (CH₄) and nitrous oxide (N₂O)) emitted from the combustion of biomass fuel.

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

- (a) The requirements of the New Source Performance Standard for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc (326 IAC 12), are not included in the permit, since the twelve (12) natural gas-fired boilers each have a maximum design heat input capacity of less than ten (10) MMBtu per hour.
- (b) The source is subject to the requirements of the New Source Performance Standard for Emission Compliance Times for Municipal Solid Waste Landfills, 40 CFR 60, Subpart Cc (326 IAC 12), since Landfill 01 and Landfill 02 both commenced construction before May 30, 1991. Landfill 01 was initially constructed (began accepting waste) in 1971 and Landfill 02 was initially constructed (began accepting waste) in 1953.

The source is subject to the following requirements of 40 CFR Part 60, Subpart Cc:

- (1) 40 CFR 60.30c
- (2) 40 CFR 60.31c
- (3) 40 CFR 60.32c
- (4) 40 CFR 60.33c (d)
- (5) 40 CFR 60.34c
- (6) 40 CFR 60.35c (a)
- (7) 40 CFR 60.36c (a)

The Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1, for the two (2) landfills, identified as Landfill 01 and Landfill 02.

- (c) The requirements of the New Source Performance Standard for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984, 40 CFR 60, Subpart Kb (326 IAC 12), are not included in the permit, since each of the eight (8) vehicle fuel dispensers (VFD01 through VFD08) and the four (4) used oil tanks (UOil1 through UOil4) have design capacities less than 75 cubic meters (m³) (39,890 gallons).
- (d) The requirements of the New Source Performance Standard for Automobile and Light Duty Truck Surface Coating Operations, 40 CFR 60, Subpart MM (326 IAC 12), are not included in the permit, since this source is not an automobile or light-duty truck assembly plant.
- (e) The requirements of the New Source Performance Standard for Bulk Gasoline Terminals, 40 CFR 60, Subpart XX (326 IAC 12), are not included in the permit since this source does not deliver liquid product into gasoline tank trucks.
- (f) The requirements of the New Source Performance Standard for Municipal Solid Waste Landfills, 40 CFR 60, Subpart WWW, are not included in the permit since the two landfills located at Camp Atterbury Joint Maneuver Training Center were constructed prior to May 30, 1991.
- (g) The six (6) emergency generators, identified as GEN07, GEN12, GEN13, GEN14, GEN16, GEN17, are subject to the New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines (40 CFR 60, Subpart IIII), because these units are stationary compression ignition internal combustion engines that were constructed (order by the source) after July 11, 2005 and manufactured after April 1, 2006.

The units subject to this rule include the following:

Six (6) emergency jet fueled (JP8)-fired generators (GEN07, GEN12, GEN13, GEN14, GEN16, and GEN17)

Applicable portions of the NSPS are the following:

- (1) 40 CFR 60.4200(a)(2)(i)
- (2) 40 CFR 60.4205(b)
- (3) 40 CFR 60.4206
- (4) 40 CFR 60.4207
- (5) 40 CFR 60.4208
- (6) 40 CFR 60.4209
- (7) 40 CFR 60.4211(f)
- (8) 40 CFR 60.4212
- (9) 40 CFR 60.4214(b) and (c)
- (10) 40 CFR 60.4218
- (11) 40 CFR 60.4219
- (12) Table 5
- (13) Table 8

The requirements of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated as 326 IAC 12-1, apply to the emergency generators, except as otherwise specified in 40 CFR 60, Subpart IIII.

The seven (7) diesel-fired emergency generators (GEN01 through GEN05, GEN10, and GEN15) are not subject to the New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines (40 CFR 60, Subpart IIII), because these units are stationary

compression ignition internal combustion engines that were constructed (order by the source) before July 11, 2005, and manufactured before April 1, 2006.

The one (1) propane-fired emergency generator (GEN06) and the three (3) natural gas-fired emergency generators (GEN08, GEN09, and GEN11) are not subject to the New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines (40 CFR 60, Subpart IIII), because these units are not stationary compression ignition internal combustion engines. These units are stationary spark ignition internal combustion engines.

- (h) The one (1) emergency propane-fired generator (GEN06) (40.2 HP, manufactured in 2011, and installed in 2011) is subject to the New Source Performance Standards for Stationary Spark Ignition Internal Combustion Engines (40 CFR 60, Subpart JJJJ), because this unit is a stationary spark ignition internal combustion engine that was constructed (order by the source) after June 12, 2006 and manufactured on or after January 1, 2009.

The units subject to this rule include the following:

One (1) emergency propane-fired generator (GEN06)

Applicable portions of the NSPS are the following:

- (1) 40 CFR 60.4230(a)(4)(iv) and (c)
- (2) 40 CFR 60.4233(c)
- (3) 40 CFR 60.4234
- (4) 40 CFR 60.4236
- (5) 40 CFR 60.4237(c)
- (6) 40 CFR 60.4243(a) and (d)
- (7) 40 CFR 60.4244
- (8) 40 CFR 60.4245(a), (b), and (d)
- (9) 40 CFR 60.4246
- (10) 40 CFR 60.4248
- (11) Table 2
- (12) Table 3

The requirements of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated as 326 IAC 12-1, apply to the unit except as otherwise specified in 40 CFR 60, Subpart JJJJ.

The thirteen (13) diesel-fired emergency generators (GEN01 through GEN05, GEN07, GEN10, GEN12 through GEN17) are not subject to the New Source Performance Standards for Stationary Spark Ignition Internal Combustion Engines (40 CFR 60, Subpart JJJJ), because these units are not stationary spark ignition internal combustion engines. These units are stationary compression ignition internal combustion engines.

The three (3) natural gas-fired emergency generators (GEN08, GEN09, and GEN11) are not subject to the New Source Performance Standards for Stationary Spark Ignition Internal Combustion Engines (40 CFR 60, Subpart JJJJ), because:

- (1) natural gas-fired emergency generator GEN08 (9.4 HP, manufactured in February 2007, installed in 2011) was constructed (ordered by the source) after June 12, 2006, but was manufactured before July 1, 2008 (for engines with a maximum engine power less than or equal to 25 HP)
- (2) natural gas-fired emergency generator GEN09 (9.4 HP, manufactured in March 2008, installed in 2011) was constructed (ordered by the source) after June 12, 2006, but was manufactured before July 1, 2008 (for engines with a maximum engine power less than or equal to 25 HP)

- (3) natural gas-fired emergency generator GEN11 (80.4 HP, manufactured in October 2005, installed constructed in 2011) was constructed (ordered by the source) after June 12, 2006, but was manufactured before January 1, 2009 (for engine power greater than 25 HP)
- (i) The requirements of the New Source Performance Standard for Stationary Spark Ignition Internal Combustion Engines, 40 CFR 60, Subpart JJJJ, are not included in the permit for the three (3) emergency natural gas-fired generators (GEN08, GEN09, and GEN11) because these three generators were manufactured before January 1, 2009 as defined in §60.4230(a)(4)(iv).
- (j) There are no other New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (k) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Gasoline Distribution Facilities, 40 CFR 63, Subpart R (326 IAC 20-10), are not included in the permit, since this source is not a bulk gasoline terminal as defined in 326 IAC 63.42.
- (l) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Halogenated Solvent Cleaning, 40 CFR 63, Subpart T (326 IAC 20-6), are not included in the permit, since the fifteen (15) degreasing facilities do not use any solvents containing methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, or chloroform, or any combination of these as described in 40 CFR 63.460
- (m) The requirements of the National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills, 40 CFR 63, Subpart AAAA (326 IAC 20-67) are not included in the permit, since Landfill 01 and Landfill 02 were both permanently closed as of January 16, 2003, this source does not meet the definition of a major source as defined in 40 CFR 63.2, and this source is an area source landfill that has a design capacity less than 2.5 million megagrams (Mg) and 2.5 million cubic meters (m³) and has estimated uncontrolled emissions less than 50 megagrams per year (Mg/yr) NMOC.
- (n) The requirements of the National Emission Standards for Hazardous Air Pollutants for Surface Coating of Automobiles and Light-Duty Trucks, 40 CFR 63, Subpart IIII (326 IAC 20-85) are not included in the permit, since this source does not perform surface coating of new automobiles or new light-duty trucks.
- (o) The requirements of the National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products, 40 CFR 63, Subpart MMMM, are not included in the permit, since this source is not located in or part of a major source of HAPs.
- (p) The requirements of the National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products, 40 CFR 63 Subpart PPPP (326 IAC 20-81), are not included in the permit, since the source is not located at a major source of HAPs.
- (q) The requirements of the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 CFR 63, Subpart ZZZZ, are not included in the permit for the two (2) diesel-fired emergency generators (GEN01 and GEN15) (80.4 HP and 26.8 HP, respectively), since these two emergency institutional generators are exempt as defined in §63.6585(f)(3), which was amended on January 30, 2013 and is effective April 1, 2013.
- (r) The eleven (11) diesel-fired emergency generators (GEN02 through GEN05, GEN07, GEN10, GEN12 through GEN14, GEN16 and GEN17) the one (1) propane-fired emergency generator (GEN06) and the three (3) natural gas-fired emergency generators (GEN08, GEN09, and GEN11) are subject to the requirements of the 40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines

(326 IAC 20-82), because they are considered new (construction commenced on or after June 12, 2006) stationary reciprocating internal combustion engines (RICE) at an area source of hazardous air pollutants (HAP).

Construction of the eleven (11) diesel-fired emergency generators (GEN02 through GEN05, GEN07, GEN10, GEN12 through GEN14, GEN16 and GEN17) the one (1) propane-fired emergency generator (GEN06) and the three (3) natural gas-fired emergency generators (GEN08, GEN09, and GEN11) commenced on or after June 12, 2006.

The eleven (11) diesel-fired emergency generators (GEN02 through GEN05, GEN07, GEN10, GEN12 through GEN14, GEN16 and GEN17) the one (1) propane-fired emergency generator (GEN06) and the three (3) natural gas-fired emergency generators (GEN08, GEN09, and GEN11) are each subject the following applicable portions of the NESHAP for new stationary RICE at an area source of HAP:

- (1) 40 CFR 63.6580
- (2) 40 CFR 63.6585
- (3) 40 CFR 63.6590(a)(2)(iii) and (c)(1)
- (4) 40 CFR 63.6595(a)(6) and (a)(7)
- (5) 40 CFR 63.6665
- (6) 40 CFR 63.6670
- (7) 40 CFR 63.6675

Pursuant to 40 CFR 63.6665, the eleven (11) diesel-fired emergency generators (GEN02 through GEN05, GEN07, GEN10, GEN12 through GEN14, GEN16 and GEN17) the one (1) propane-fired emergency generator (GEN06) and the three (3) natural gas-fired emergency generators (GEN08, GEN09, and GEN11) do not have to meet the requirements of 40 CFR 63, Subpart A (General Provisions), since they each are considered a new stationary RICE located at an area source of HAP emissions.

- (s) The two (2) gasoline vehicle fuel dispensing tanks (VFD04 and VFD07) are each subject to the requirements of the 40 CFR 63, Subpart CCCCCC (6C), National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Category: Gasoline Dispensing Facilities, because VFD04 dispenses gasoline at a monthly throughput of 10,000 gallons or more and is located at an area source of HAPs and VFD07 dispenses gasoline at a monthly throughput of less than 10,000 gallons of gasoline and is located at an area source of HAPs.

VFD04 is subject to the following applicable portions of the NESHAP for Gasoline Dispensing Facilities at an area source of HAP:

- (1) 40 CFR 63.11110
- (2) 40 CFR 63.11111(a), (c), (e), (f), (h), (i), (j), (k)
- (3) 40 CFR 63.11112(a), (d)
- (4) 40 CFR 63.11113(b)
- (5) 40 CFR 63.11115
- (6) 40 CFR 63.11117
- (7) 40 CFR 63.11124(a)
- (8) 40 CFR 63.11125(d)
- (9) 40 CFR 63.11126(b)
- (10) 40 CFR 63.11130
- (11) 40 CFR 63.11131
- (12) 40 CFR 63.11132
- (13) Table 3

VFD07 is subject to the following applicable portions of the NESHAP for Gasoline Dispensing Facilities at an area source of HAP:

- (1) 40 CFR 63.11110
- (2) 40 CFR 63.11111(a), (b), (e), (f), (h), (i), (j), (k)
- (3) 40 CFR 63.11112(a), (b)
- (4) 40 CFR 63.11113(a)
- (5) 40 CFR 63.11115
- (6) 40 CFR 63.11116
- (7) 40 CFR 63.11124
- (8) 40 CFR 63.11125(d)
- (9) 40 CFR 63.11126(b)
- (10) 40 CFR 63.11130
- (11) 40 CFR 63.11131
- (12) 40 CFR 63.11132
- (13) Table 3

Pursuant to 40 CFR 63.11130, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1, as specified in Table 3 of 40 CFR Part 63, Subpart CCCCCC in accordance with schedule in 40 CFR 63 Subpart CCCCCC.

Pursuant to 40 CFR 63.11132, VFD01, VFD02, VFD03, VFD05, VFD06, and VFD08 are each not subject to 40 CFR 63, Subpart CCCCCC (6C), since each do not dispense gasoline fuel.

- (t) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the permit.

Compliance Assurance Monitoring (CAM)

- (u) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the unlimited potential to emit of the source is less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

State Rule Applicability Determination

The following state rules are applicable to the source:

- (a) 326 IAC 2-6.1 (Minor Source Operating Permits (MSOP))
MSOP applicability is discussed under the Permit Level Determination – MSOP section above.
- (b) 326 IAC 2-2 (Prevention of Significant Deterioration(PSD))
This source is not a major stationary source, under PSD (326 IAC 2-2), because the potential to emit of all attainment regulated criteria pollutants are less than 250 tons per year, the potential to emit greenhouse gases (GHGs) is less than 100,000 tons of CO₂e per year, and this source is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1). Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.
- (c) 326 IAC 2-3 (Emission Offset)
This existing source is not a major stationary source, under Emission Offset (326 IAC 2-3), because the potential to emit all nonattainment regulated pollutants are less than 100 tons per year. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.
- (d) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The potential to emit of any single HAP is less than ten (10) tons per year and the potential to emit of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-4.1.

- (e) 326 IAC 2-6 (Emission Reporting)
Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, or LaPorte County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.
- (f) 326 IAC 5-1 (Opacity Limitations)
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:
 - (1) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.
- (g) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4.
- (h) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
The source is not subject to the requirements of 326 IAC 6-5, because the fugitive dust sources have potential fugitive particulate emissions less than 25 tons per year.
- (i) 326 IAC 12 (New Source Performance Standards)
See Federal Rule Applicability Section of this TSD.
- (j) 326 IAC 20 (Hazardous Air Pollutants)
See Federal Rule Applicability Section of this TSD.

Abrasive Blasting Gloveboxes

- (k) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(b)(14), the requirements of 326 IAC 6-3-2 are not applicable to each of the five (5) abrasive gloveboxes, since each of these units has potential particulate emissions less than 0.551 pounds per hour.

Degreasing Operation

- (l) 326 IAC 8-1-6 (Volatile Organic Compound: New Facilities)
The fifteen (15) degreasers are each not subject to 326 IAC 8-1-6, because each degreaser has a potential to emit VOC less than 25 tons per year and are subject to the requirements of 326 IAC 8-3-2.
- (m) 326 IAC 8-3-2 (Cold Cleaner Degreaser Control Equipment and Operating Requirements)
Pursuant to 326 IAC 8-3-2, the Permittee shall comply with the following:

For each cold cleaning degreaser constructed after January 1, 1980, the Permittee shall ensure the following control equipment and operating requirements are met:

- (1) Equip the degreaser with a cover;
- (2) Equip the degreaser with a device for draining cleaned parts;

- (3) Close the degreaser cover whenever parts are not being handled in the degreaser;
- (4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (5) Provide a permanent, conspicuous label that lists the operating requirements in subdivisions (3), (4), (6), and (7).
- (6) Store waste solvent only in closed containers.
- (7) Prohibit the disposal or transfer of waste solvent in such a manner that could allow greater than twenty percent (20%) of the waste solvent (by weight) to evaporate into the atmosphere.

For each cold cleaner degreaser without a remote solvent reservoir that was constructed after July 1, 1990, the Permittee shall ensure the following additional control equipment and operating requirements are met:

- (1) Equip the degreaser with one (1) of the following control devices if the solvent is heated to a temperature of greater than forty-eight and nine-tenths (48.9) degrees Celsius (one hundred twenty (120) degrees Fahrenheit):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent used is insoluble in, and heavier than water.
 - (C) A refrigerated chiller.
 - (D) Carbon adsorption.
 - (E) An alternative system of demonstrated equivalent or better control as those outlined in clauses (i) through (iv) that is approved by the department. An alternative system shall be submitted to the US EPA as a SIP revision.
- (2) Ensure the degreaser cover is designed so that it can be easily operated with one (1) hand if the solvent is agitated or heated.
- (3) If used, solvent spray:
 - (A) must be solid, fluid stream; and
 - (B) shall be applied at a pressure that does not cause excessive splashing.

Emergency Generators

- (o) 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)
The seventeen (17) emergency generators are not subject to 326 IAC 6-2, since they are not sources of indirect heating.
- (p) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(b)(14), the seventeen (17) emergency generators are not subject to 326 IAC 6-3-2, since they have a potential particulate emission of less than 0.551 pounds per hour.

- (q) 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)
The seventeen (17) emergency generators are not subject to 326 IAC 7-1.1, since they each have potential sulfur dioxide emissions of less than twenty-five (25) tons per year and ten (10) pounds per hour.
- (r) 326 IAC 8-1-6 (Volatile Organic Compounds: New Facilities)
The seventeen (17) emergency generators are not subject to 326 IAC 8-1-6, since they each have potential VOC emissions of less than 25 tons per year.

Landfills

- (s) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(b)(14), the two (2) closed landfills are not subject to 326 IAC 6-3-2, since they have potential particulate emission of less than 0.551 pounds per hour.
- (t) 326 IAC 8-8.1 (Municipal Solid Waste Landfills Not Located in Clark, Floyd, Lake, and Porter Counties)
Landfill 01 is subject to the requirements of 326 IAC 8-8.1, since it meets the definition of an "existing municipal solid waste (MSW) landfill" under 326 IAC 8-8.1-2. Landfill 01 (which is now closed) commenced construction prior to May 30, 1991, and accepted waste beyond November 8, 1987. Pursuant to 326 IAC 8-8.1-3, the Permittee shall comply with the requirements of 40 CFR 60.751, 60.752, 60.753, 60.754, 60.755, 60.756, 60.757, 60.758, and 60.759 (40 CFR 60, Subpart WWW, Standards of Performance for Municipal Solid Waste Landfills). The compliance with the provisions of 40 CFR 60.750 through 60.759, Subpart WWW, shall ensure compliance with the provisions of this rule.

Pursuant to 326 IAC 8-8.1-1, Landfill 02 is not subject to 326 IAC 8-8.1-1, because Landfill 02 is not an existing municipal solid waste (MSW) landfill and has not accepted waste since November 8, 1987, as defined in 326 IAC 8-8.1-2(b).

Surface Coating Operation

- (u) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(b)(15), the two (2) spray booths are not subject to 326 IAC 6-3-2, since they use less than five (5) gallons of coating per day.
- (v) 326 IAC 8-1-6 (Volatile Organic Compounds: New Facilities)
The two (2) spray booths are not subject to 326 IAC 8-1-6, since the potential VOC emissions from each booth is less than 25 tons per year.
- (w) 326 IAC 8-2-2 (Automobiles and Light Duty Truck Coating Operations)
The two (2) spray booths are not subject to 326 IAC 8-2-2, since this source is not an automobile and/or light duty truck assembly plant.
- (x) 326 IAC 8-2-9 (Miscellaneous Metal and Plastic Coating Operations)
The two (2) spray booths are each not subject to 326 IAC 8-2-9, because each does not perform metal surface coating of any of the items listed under 326 IAC 8-2-9(a)(1) and this source does not operate under any of the Standard Industrial Classification (SIC) Codes listed under 326 IAC 8-2-9(a)(1)(E).
- (y) 326 IAC 8-10 (Automobile Refinishing)
The two (2) spray booths are each not subject to 326 IAC 8-10, since each booth is used as touch-up coating application, which is exempt from this rule under 326 IAC 8-10-1(b)(3).

There are no other 326 IAC 8 Rules that are applicable to the two (2) spray booths.

Tanks and Fuel Dispensing

- (z) 326 IAC 8-4-3 (Petroleum Liquid Storage Facilities)
The eight (8) vehicle dispensing tanks, identified as VFD01 through VFD08, and the five (5) used oil storage tanks (UOil01 through UOil05) are each not subject to 326 IAC 8-4-3, since each tank has a capacity of less than thirty-nine thousand (39,000) gallons, VFD01, VFD02, VFD03, VFD05, VFD06, and VFD08 dispense JP8 (jet fuel), which has a true vapor pressure of less than 1.52 psi, and the five (5) used oil storage tanks (UOil01 through UOil05) store used oil, which has a true vapor pressure of less than 1.52 psi.
- (aa) 326 IAC 8-4-6 (Gasoline Dispensing Facilities)
- (1) Each of the fuel dispensing operations (VFD01, VFD02, VFD03, VFD06, and VFD08) is not subject to the requirements 326 IAC 8-4-6, since JP8 fuel (which is similar to diesel fuel and kerosene) dispensing facilities are not considered gasoline dispensing facilities as defined by 326 IAC 8-4-6(a)(8).
- (2) Each of the AST fuel dispensing operations (VFD05 and VFD07) is not subject to the requirements 326 IAC 8-4-6, since each has a monthly gasoline throughput of less than ten thousand (10,000) gallons per month.
- (bb) 326 IAC 8-4-6 (Gasoline Dispensing Facilities)
Pursuant to 326 IAC 8-4-1(b)(6) and 326 IAC 8-4-6(a)(8), the UST gasoline dispensing operation (VFD04) is subject to the requirements 326 IAC 8-4-6, since it has a monthly gasoline throughput of ten thousand (10,000) gallons per month or greater.

The Permittee shall comply with the following provisions of 326 IAC 8-4-6, for the one (1) gasoline vehicle fuel dispensing unit, identified as VFD04:

- (1) No owner or operator of a gasoline dispensing facility shall allow the transfer of gasoline between any transport and any storage tank unless the tank is equipped with the following:
- (A) A submerged fill pipe that extends to not more than:
- (i) twelve (12) inches from the bottom of the storage tank if the fill pipe was installed on or before November 9, 2006; or
- (ii) six (6) inches from the bottom of the storage tank if the fill pipe was installed after November 9, 2006.
- (B) Either a pressure relief valve set to release at not less than seven-tenths (0.7) pounds per square inch or an orifice of five-tenths (0.5) inch in diameter.
- (C) A vapor balance system connected between the tank and the transport operating according to manufacturer's specifications.
- (2) If the owner or employees of the owner of a gasoline dispensing facility are not present during loading, it shall be the responsibility of the owner or the operator of the transport to make certain the vapor balance system is:
- (A) connected between the transport and the storage tank; and
- (B) operating according to manufacturer's specifications.

Pursuant to 326 IAC 8-4-6(a)(8), VFD01, VFD02, VFD03, VFD05, VFD06, and VFD08 are each not gasoline dispensing facilities and are each thus not subject to 326 IAC 8-4-6(b). Pursuant to

326 IAC 8-4-1(b), VFD07 is not located in Boone, Dearborn, Hamilton, Hancock, Harrison, Johnson, Morgan, or Shelby Counties and is thus not subject to 326 IAC 8-4-6.

- (cc) 326 IAC 8-4-9 (Leaks from transports and vapor collection systems; records)
The UST gasoline dispensing operation (VFD04) is subject to the requirements of 326 IAC 8-4-6. Therefore, pursuant to 326 IAC 8-4-9(a)(1), the UST gasoline dispensing operation (VFD04) and associated vapor balance, collection, and control systems shall be subject to the requirements of 326 IAC 8-4-9.

Pursuant to 326 IAC 8-4-9, the Permittee shall comply with the following requirements for VFD04 and associated vapor balance, collection, and control systems:

- (1) No person shall allow a gasoline transport that is subject to this rule and that has a capacity of two thousand (2,000) gallons or more to be filled or emptied unless the gasoline transport completes the following:
 - (A) Annual leak detection testing before the end of the twelfth (12th) calendar month following the previous year's test, according to test procedure contained in 40 CFR 63.425(e), as follows:
 - (i) Conduct the pressure and vacuum tests for the transport's cargo tank using a time period of five (5) minutes. The initial pressure for the pressure test shall be four hundred sixty (460) millimeters H₂O (eighteen (18) inches H₂O) gauge. The initial vacuum for the vacuum test shall be one hundred fifty (150) millimeters H₂O (six (6) inches H₂O) gauge. The maximum allowable pressure or vacuum change is twenty-five (25) millimeters H₂O (one (1) inch H₂O) in five (5) minutes.
 - (ii) Conduct the pressure test of the cargo tank's internal vapor valve as follows:
 - (a) After completing the test under clause (A) of this condition, use the procedures in 40 CFR 60, Appendix A, Method 27 to repressurize the tank to four hundred sixty (460) millimeters H₂O (eighteen (18) inches H₂O) gauge. Close the transport's internal vapor valve or valves, thereby isolating the vapor return line and manifold from the tank.
 - (b) Relieve the pressure in the vapor return line to atmospheric pressure, then reseal the line. After five (5) minutes, record the gauge pressure in the vapor return line and manifold. The maximum allowable five (5) minute pressure increase is one hundred thirty (130) millimeters H₂O (five (5) inches H₂O).
 - (B) Repairs by the gasoline transport owner or operator, if the transport does not meet the criteria of subsection (a)(1) of this condition, and retesting to prove compliance with the criteria of subsection (a)(1) of this condition.
- (2) The annual test data remain valid until the end of the twelfth (12th) calendar month following the test. The owner of the gasoline transport shall be responsible for compliance with subsection (a) of this condition and shall provide the owner of the loading facility with the most recent valid modified 40 CFR 60, Appendix A, Method 27 test results upon request. The owner of the loading facility shall take all reasonable steps, including reviewing the test date and tester's signature, to ensure that gasoline transports loading at its facility comply with subsection (a) of this condition.
- (3) The Permittee shall:

- (A) Design and operate the applicable system and the gasoline loading equipment in a manner that prevents:
 - (i) Gauge pressure from exceeding four thousand five hundred (4,500) Pascal's (eighteen (18) inches of H₂O) and a vacuum from exceeding one thousand five hundred (1,500) Pascal's (six (6) inches of H₂O) in the gasoline transport;
 - (ii) A reading equal to or greater than twenty one thousand (21,000) parts per million as propane, from all points on the perimeter of a potential leak source when measured by the method referenced in 40 CFR 60 Appendix A, Method 21, or an equivalent procedure approved by the commissioner during loading or unloading operations at gasoline dispensing facilities, bulk plants, and bulk terminals; and
 - (iii) Avoidable visible liquid leaks during loading or unloading operations at gasoline dispensing facilities, bulk plants, and bulk terminals.
- (B) Within fifteen (15) days, repair and retest a vapor balance, collection, or control system that exceeds the limits in subsection (c)(1) of this condition.
- (4) The department may, at any time, monitor a gasoline transport, vapor balance, or vapor control system to confirm continuing compliance with subsection (a) of this condition.
- (5) If the commissioner allows alternative test procedures, such method shall be submitted to the U.S. EPA as a SIP revision.
- (6) During compliance tests conducted under 326 IAC 3-6 (stack testing), each vapor balance or control system shall be tested applying the standards described in subsection (c)(1)(B) of this condition. Testers shall use 40 CFR 60, Appendix A, Method 21 to determine if there are any leaks from the hatches and the flanges of the gasoline transports. If any leak is detected, the transport cannot be used for the capacity of the compliance test of the bulk gas terminal. The threshold for leaks shall be ten thousand (10,000) parts per million methane.
- (dd) 326 IAC 8-9-1 (Volatile Organic Liquid Storage Vessels)
The eight (8) vehicle dispensing tanks, identified as VFD01 through VFD08, and the five (5) used oil storage tanks (UOil01 through UOil05) are each not subject to 326 IAC 8-9-1 (Volatile Organic Liquid Storage Vessels), since each vessel is not located in Clark, Floyd, Lake, or Porter County.

Welding and Torch Cutting Operation

- (ee) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(b)(9), the welding and torch cutting operation is not subject to 326 IAC 6-3-2, since each welding station has a potential welding wire usage of less than 625 pounds per day and each torch cutting station has a potential cutting rate of less than 3,400 inches per hour of metal stock 1 inch thickness or less.

Natural Gas-Fired Boilers

- (ff) 326 IAC 6-2-4 (Emission limitations for facilities specified in 326 IAC 6-2-1(d))
Pursuant to 326 IAC 6-2-1(d), the twelve (12) natural gas-fired boilers are all subject to 326 IAC 6-2-4 because they are indirect heating units that were constructed after September 21, 1983.
Pursuant to 326 IAC 6-2-1(d), the twelve (12) natural gas-fired boilers shall be limited as follows:

When $Q < 10$ MMBtu per hour, P_t shall not exceed 0.6

$$\text{When } 10 < Q \leq 10,000 \text{ MMBtu per hour, } Pt = \frac{1.09}{Q^{0.26}}$$

Where Q = Total source maximum operating capacity in MMBtu/hr heat input and,

Pt = pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input.

Emission Unit/ID	Construction Date	Q (MMBtu/hr)	Pt (lb/MMBtu)
Training Institute/ Series # 7.0	1996	1.01	0.6
Training Institute/ Series # 9.4	1996	1.01 + 0.81 = 1.82	0.6
Conference Center/ 2-95938	2004	1.01 + 0.81 + 0.14025 = 1.96	0.6
Conference Center/ 2-95942	2004	1.01 + 0.81 + 0.14025 + 0.14025 = 2.1	0.6
King's Hall/ 95939	2004	1.01 + 0.81 + 0.14025 + 0.14025 + 1.26 = 3.36	0.6
King's Hall/ 95932	2004	1.01 + 0.81 + 0.14025 + 0.14025 + 1.26 + 0.28 = 3.64	0.6
CAMCCO/ 223517	2005	1.01 + 0.81 + 0.14025 + 0.14025 + 1.26 + 0.28 + 4.2 = 7.84	0.6
CAMCCO/ 223518	2005	1.01 + 0.81 + 0.14025 + 0.14025 + 1.26 + 0.28 + 4.2 + 4.2 = 12.04	0.57
CAMCCO/ G-05-0277	2005	1.01 + 0.81 + 0.14025 + 0.14025 + 1.26 + 0.28 + 4.2 + 4.2 + 1.0 = 13.04	0.56
CAMCCO/ G-05-0278	2005	1.01 + 0.81 + 0.14025 + 0.14025 + 1.26 + 0.28 + 4.2 + 4.2 + 1.0 + 1.0 = 14.04	0.55
Firehouse/ G06H00189330	2006	1.01 + 0.81 + 0.14025 + 0.14025 + 1.26 + 0.28 + 4.2 + 4.2 + 1.0 + 1.0 + 0.5 = 14.54	0.54
Range Control/ A20P02815	2009	1.01 + 0.81 + 0.14025 + 0.14025 + 1.26 + 0.28 + 4.2 + 4.2 + 1.0 + 1.0 + 0.5 + 0.3 = 14.84	0.54

- (gg) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
The twelve (12) natural gas-fired boilers are not subject to this rule since they are sources of indirect heating.

Natural Gas-Fired Heaters

- (hh) 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)
The four hundred and eighty-one (481) natural gas-fired heaters are not subject to this rule, since they are sources of direct heating.
- (ii) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)
The four hundred and eighty-one (481) natural gas-fired heaters are not subject to this rule, since they are not considered a manufacturing process.
- (jj) 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)
The four hundred and eighty-one (481) natural gas-fired heaters are not subject to 326 IAC 7-1.1, since they each have potential sulfur dioxide emissions of less than twenty-five (25) tons per year and ten (10) pounds per hour.

- (kk) 326 IAC 8-1-6 (Volatile Organic Compounds: New Facilities)
The four hundred and eighty-one (481) natural gas-fired heaters are not subject to 326 IAC 8-1-6, since they each have potential VOC emissions of less than 25 tons per year.

Propane Fired Heaters

- (ll) 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)
The one hundred and twelve (112) propane fired heaters are not subject to this rule, since they are sources of direct heating.
- (mm) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)
The one hundred and twelve (112) propane fired heaters are not subject to this rule, since they are not considered a manufacturing process.
- (nn) 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)
The one hundred and twelve (112) propane fired heaters are not subject to 326 IAC 7-1.1, since they each have potential sulfur dioxide emissions of less than twenty-five (25) tons per year and ten (10) pounds per hour.
- (oo) 326 IAC 8-1-6 (Volatile Organic Compounds: New Facilities)
The one hundred and twelve (112) propane fired heaters are not subject to 326 IAC 8-1-6, since they each have potential VOC emissions of less than 25 tons per year.

Compliance Determination, Monitoring and Testing Requirements

- (a) There are no compliance determinations or monitoring requirements applicable to this source.
- (b) There are no testing requirements applicable to this source.

Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on April 27, 2012.

The construction and operation of this source shall be subject to the conditions of the attached proposed MSOP No. M081-31782-00042. The staff recommends to the Commissioner that this MSOP be approved.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Deena Patton at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5400 or toll free at 1-800-451-6027 extension 4-5400.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.in.gov/idem

**Appendix A: Emission Calculations
Emissions Summary**

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Company Name: Camp Atterbury Joint Maneuver Training Center
Source Address: 3008 Hospital Road, Edinburgh, IN 46124
Registration No.: M081-31782-00042
Reviewer: Deena Patton

Unlimited/Uncontrolled Potential to Emit (tons/yr)												
Emission Unit	PM	PM10	PM2.5	SO ₂	NO _x	VOC	CO	Biogenic CO ₂	GHGs as CO ₂ e	Total HAPs	Highest Single HAP (hexane)*	
Abrasive Blasting	4.8E-04	4.2E-04	4.2E-04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
Degreasing Operations	0.00	0.00	0.00	0.00	0.00	0.41	0.00	0.00	0.00	negl.	negl.	--
Diesel-Fired Emergency Generators	0.66	0.66	0.66	0.62	9.35	0.76	2.02	0.00	348	8.18E-03	2.49E-03	formaldehyde
Natural Gas-Fired Emergency Generators	0.00	0.01	0.01	0.00	0.59	0.01	0.99	0.00	31	0.01	0.005	formaldehyde
Landfill 01	0.00	0.00	0.00	0.00	0.00	0.64	0.00	655	5,012	0.34	0.02	hexane
Landfill 02 (fugitive)	0.00	0.00	0.00	0.00	0.00	0.31	0.00	632	4,840	0.16	0.01	hexane
Surface Coating	0.12	0.12	0.12	0.00	0.00	0.04	0.00	0.00	0.00	negl.	negl.	--
Storage Tanks	0.00	0.00	0.00	0.00	0.00	0.55	0.00	0.00	0.00	negl.	negl.	--
Gasoline Fuel Transfer and Dispensing	0.00	0.00	0.00	0.00	0.00	10.25	0.00	0.00	0.00	0.14	0.01	hexane
Welding	2.50	2.50	2.50	0.00	0.00	negl.	0.00	0.00	0.00	0.01	0.01	Mn
Natural Gas-fired Boilers	0.12	0.48	0.48	0.04	6.37	0.35	5.35	0.00	7,694	0.12	0.11	hexane
Natural Gas-fired Heaters	0.54	2.18	2.18	0.17	28.62	1.57	24.04	0.00	34,553	0.54	0.52	hexane
Propane Combustion	0.22	0.78	0.78	0.06	14.41	1.11	8.31	0.00	14,170	0.00	0.00	--
Total	4.17	6.72	6.72	0.88	59.34	16.00	40.71	1,287	66,648	1.33	0.66	hexane

Controlled Potential to Emit (tons/yr)												
Emission Unit	PM	PM10	PM2.5	SO ₂	NO _x	VOC	CO	Biogenic CO ₂	GHGs as CO ₂ e	Total HAPs	Highest Single HAP (hexane)*	
Abrasive Blasting	2.4E-05	2.1E-05	2.1E-05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
Degreasing Operations	0.00	0.00	0.00	0.00	0.00	0.41	0.00	0.00	0.00	negl.	negl.	--
Diesel-Fired Emergency Generators	0.66	0.66	0.66	0.62	9.35	0.76	2.02	0.00	348	8.18E-03	2.49E-03	formaldehyde
Natural Gas-Fired Emergency Generators	0.00	0.01	0.01	0.00	0.59	0.01	0.99	0.00	31	0.01	0.005	formaldehyde
Landfill 01	0.00	0.00	0.00	0.00	0.00	0.64	0.00	655	5,012	0.34	0.02	hexane
Landfill 02 (fugitive)	0.00	0.00	0.00	0.00	0.00	0.31	0.00	632	4,840	0.16	0.01	hexane
Surface Coating	0.03	0.03	0.03	0.00	0.00	0.04	0.00	0.00	0.00	negl.	negl.	--
Storage Tanks	0.00	0.00	0.00	0.00	0.00	0.55	0.00	0.00	0.00	negl.	negl.	--
Gasoline Fuel Transfer and Dispensing	0.00	0.00	0.00	0.00	0.00	10.25	0.00	0.00	0.00	0.14	0.01	hexane
Welding	2.50	2.50	2.50	0.00	0.00	negl.	0.00	0.00	0.00	0.01	0.01	Mn
Natural Gas-fired Boilers	0.12	0.48	0.48	0.04	6.37	0.35	5.35	0.00	7,694	0.12	0.11	hexane
Natural Gas-fired Heaters	0.54	2.18	2.18	0.17	28.62	1.57	24.04	0.00	34,553	0.54	0.52	hexane
Propane Combustion	0.22	0.78	0.78	0.06	14.41	1.11	8.31	0.00	14,170	0.00	0.00	--
Total	4.08	6.63	6.63	0.88	59.34	16.00	40.71	1,287	66,648	1.33	#REF!	hexane

*The Highest Single HAP for the entire source is hexane. Therefore, if an emission unit emits hexane, it is listed in the table. If an emission unit does not emit hexane, the highest single HAP for that unit is listed.

**Appendix A: Emission Calculations
Abrasive Blasting Glove Boxes**

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Company Name: Camp Atterbury Joint Maneuver Training Center
Source Address: Hospital Road, Edinburgh, IN 46124
Permit Number: M081-31782-00042
Reviewer: Deena Patton

Table 1 - Emission Factors for Abrasives

Abrasive	Emission Factor (EF)	
	lb PM / lb abrasive	lb PM10 / lb PM
Steel Shot	0.004	0.86
Other (Glass Bead, Boiler Slag)	0.01	

Maximum Hourly Particulate Matter (PM) Emissions (lbs/hour)

	Abrasive Material Used	Maximum Hourly Usage Rate (lbs abrasive/hr)*	Uncontrolled PTE of PM (lbs/hr)	Control Efficiency %	Controlled PTE of PM (lbs/hr)
Abrasive blasting glovebox AB01	Glass Bead	1.54	1.54E-02	95%	7.69E-04
Abrasive blasting glovebox AB02	Steel Grit	1.31	5.23E-03	95%	2.62E-04
Abrasive blasting glovebox AB03	Boiler Slag	1.92	1.92E-02	95%	9.62E-04
Abrasive blasting glovebox AB04	Boiler Slag	1.92	1.92E-02	95%	9.62E-04
Abrasive blasting glovebox AB05	Boiler Slag	1.54	1.54E-02	95%	7.69E-04
			7.45E-02		3.72E-03

Maximum Annual Emissions (tons/year)

	Abrasive Material Used	Annual Usage Rate (lbs abrasive/year)	Uncontrolled PTE of PM (tons/yr)	Uncontrolled PTE of PM10/PM2.5 (tons/yr)	Control Efficiency %	Controlled PTE of PM (tons/yr)	Controlled PTE PM10/PM2.5 (tons/yr)
Abrasive blasting glovebox AB01	Glass Bead	20	1.0E-04	8.6E-05	95%	5.0E-06	4.3E-06
Abrasive blasting glovebox AB02	Steel Grit	17	3.4E-05	2.9E-05	95%	1.7E-06	1.5E-06
Abrasive blasting glovebox AB03	Boiler Slag	25	1.3E-04	1.1E-04	95%	6.3E-06	5.4E-06
Abrasive blasting glovebox AB04	Boiler Slag	25	1.3E-04	1.1E-04	95%	6.3E-06	5.4E-06
Abrasive blasting glovebox AB05	Boiler Slag	20	1.0E-04	8.6E-05	95%	5.0E-06	4.3E-06
			4.8E-04	4.2E-04		2.4E-05	2.1E-05

METHODOLOGY

*Source states that these units are not used very often at most they are used 15 to 30 minutes per week and that one of the units has only been used once in the past 3 years.
Maximum Hourly Usage Rate (lbs abrasive/hr) = Annual Usage Rate (lbs abrasive/year) * (year/52 weeks) / [(Hours Operated of 15 minutes/week) * (hour/60 minutes)]
Emission Factors from STAPPA/ALAPCO "Air Quality Permits", Vol. I, Section 3 "Abrasive Blasting" (1991 edition)
Potential to Emit (lbs/hour) = [Sand Usage Rate (lbs abrasive/hr)] x [Emission Factor (lb/lb abrasive)]
Potential to Emit (tons/year) = [Potential to Emit (lbs/hour)] x [8760 hours/year] x [ton/2000 lbs]
*PM2.5 emissions assumed equal to PM10.

Note: Abrasive blasting gloveboxes are located in vehicle repair areas and are used for vehicle repair, paint removal, or preparing equipment for spot welding.

**Appendix A: Emissions Calculations
VOC Emissions
From Degreasing Operations**

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**Company Name: Camp Atterbury Joint Maneuver Training Center
Address City IN Zip: Hospital Road, Edinburgh, IN 46124
Permit No.: M081-31782-00042
Reviewer: Deena Patton**

Degreasing Operations - Highest VOC Degreaser

Emission Unit	Usage (gal/year)	Solvent Density (lb/gal)	Percentage VOC	Potential VOC Emissions (lb/year)	Potential VOC Emissions (tons/year)
Building 124 degreaser DG01	11.70	6.7	100.00%	78.39	0.04
Building 630 System One parts washer DG02	10.00	6.7	100.00%	67	0.03
Building 630 Recycle-Kleen parts washer DG03	6.70	6.7	100.00%	44.89	0.02
Building 630 Zep solvent recycler degreaser DG04	1.70	6.7	100.00%	11.39	0.01
Building 633 Inland Technology degraser DG05	18.30	6.7	100.00%	122.61	0.06
Building 633 Recycle-Kleen parts washer DG06	6.70	6.7	100.00%	44.89	0.02
Building 633 Zep degreaser DG07	15.00	6.7	100.00%	100.5	0.05
Building 655 Inland Technology degreaser DG08	1.70	6.7	100.00%	11.39	0.01
Building 710 Zep degreaser DG09	15.00	6.7	100.00%	100.5	0.05
Building 10411 Inland Technology degreaser DG10	6.70	6.7	100.00%	44.89	0.02
Building 12411 Inland Technology degreaser DG11	6.70	6.7	100.00%	44.89	0.02
Building 14112 Inland Technology degreaser DG12	6.70	6.7	100.00%	44.89	0.02
Building 18411 Inland Technology degreaser DG13	6.70	6.7	100.00%	44.89	0.02
Building 21113 Inland Technology degreaser DG14	6.70	6.7	100.00%	44.89	0.02
Building T0808 degreaser DG15	2.30	6.7	100.00%	15.41	0.01
Total	122.60			821.42	0.41

Methodology

Potential VOC Emissions (lb/year) = Usage (gal/year) * Solvent Density (lb/gal)

Potential VOC Emissions (tons/year) = Potential VOC Emissions (lb/year) * 1 ton/2000 lbs

Appendix A: Emission Calculations
Emergency Generators
Reciprocating Internal Combustion Engines - Diesel Fuel
Output Rating (<=600 HP)
Maximum Input Rate (<=4.2 MMBtu/hr)

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Company Name: Camp Atterbury Joint Maneuver Training Center
Source Address: Hospital Road, Edinburgh, IN 46124
Permit Number: M081-31782-00042
Reviewer: Deena Patton

Emissions calculated based on output rating (hp)

Unit	Output Horsepower Rating (hp)	Maximum Hours Operated per Year	Potential Throughput (hp-hr/yr)
GEN01	80.40	500	40200.00
GEN02	80.40	500	40200.00
GEN03	107.30	500	53650.00
GEN04	107.30	500	53650.00
GEN05	107.30	500	53650.00
GEN07	134.10	500	67050.00
GEN10	67.10	500	33550.00
GEN12	134.10	500	67050.00
GEN13	134.10	500	67050.00
GEN14	67.10	500	33550.00
GEN15	26.80	500	13400.00
GEN16	80.40	500	40200.00
GEN17	80.40	500	40200.00
Totals	1206.80		603400.00

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/hp-hr	0.0022	0.0022	0.0022	0.0021	0.0310	0.0025	0.0067
Potential Emission in tons/yr	0.66	0.66	0.66	0.62	9.35	0.76	2.02

*PM and PM2.5 emission factors are assumed to be equivalent to PM10 emission factors. No information was given regarding which method was used to determine the factor or the fraction of PM10 which is condensable.

Hazardous Air Pollutants (HAPs)

	Pollutant							
	Benzene	Toluene	Xylene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Acrolein	Total PAH HAPs***
Emission Factor in lb/hp-hr****	6.53E-06	2.86E-06	2.00E-06	2.74E-07	8.26E-06	5.37E-06	6.48E-07	1.18E-06
Potential Emission in tons/yr	2.0E-03	8.6E-04	6.0E-04	8.3E-05	2.5E-03	1.6E-03	2.0E-04	3.5E-04

***PAH = Polycyclic Aromatic Hydrocarbon (PAHs are considered HAPs, since they are considered Polycyclic Organic Matter)

****Emission factors in lb/hp-hr were calculated using emission factors in lb/MMBtu and a brake specific fuel consumption of 7,000 Btu / hp-hr (AP-42 Table 3.3-1).

Potential Emission of Total HAPs (tons/yr)	8.2E-03
---	----------------

Green House Gas Emissions (GHG)

	Pollutant		
	CO2	CH4	N2O
Emission Factor in lb/hp-hr	1.15	4.63E-05	9.26E-06
Potential Emission in tons/yr	347	1.4E-02	2.8E-03

Summed Potential Emissions in tons/yr	347
CO2e Total in tons/yr	348

Methodology

Emission Factors are from AP42 (Supplement B 10/96), Tables 3.3-1 and 3.3-2

CH4 and N2O Emission Factor from 40 CFR 98 Subpart C Table C-2.

Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Potential Throughput (hp-hr/yr) = [Output Horsepower Rating (hp)] * [Maximum Hours Operated per Year]

Potential Emission (tons/yr) = [Potential Throughput (hp-hr/yr)] * [Emission Factor (lb/hp-hr)] / [2,000 lb/ton]

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O

Potential Emission ton/yr x N2O GWP (310).

Appendix A: Emission Calculations
Natural Gas-Fired Emergency Generators
4-Stroke Rich-Burn (4SRB) Engines

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Company Name: Camp Atterbury Joint Maneuver Training Center
Source Address: Hospital Road, Edinburgh, IN 46124
Permit Number: M081-31782-00042
Reviewer: Deena Patton

Maximum Output Horsepower Rating (hp)	139	Emission Unit	Horsepower Rating (hp)
Brake Specific Fuel Consumption (BSFC) (Btu/hp-hr)	7600	Gen06*	40.2
Maximum Hours Operated per Year (hr/yr)	500	GEN08	9.4
Potential Fuel Usage (MMBtu/yr)	530	GEN09	9.4
High Heat Value (MMBtu/MMscf)	1020	GEN11	80.4
Potential Fuel Usage (MMcf/yr)	0.52	Total	139.4

*There are no applicable emission factors for propane fired generators in AP42 or Webfire, thus Gen06 is calculated with natural gas emission factors.

Criteria Pollutants	Pollutant						
	PM*	PM10*	PM2.5*	SO2	NOx	VOC	CO
Emission Factor (lb/MMBtu)	9.50E-03	1.94E-02	1.94E-02	5.88E-04	2.21E+00	2.96E-02	3.72E+00
Potential Emissions (tons/yr)	0.003	0.005	0.005	1.6E-04	0.59	0.01	0.99

*PM emission factor is for filterable PM-10. PM10 emission factor is filterable PM10 + condensable PM.

PM2.5 emission factor is filterable PM2.5 + condensable PM.

Hazardous Air Pollutants (HAPs)

Pollutant	Emission Factor (lb/MMBtu)	Potential Emissions (tons/yr)
Acetaldehyde	2.79E-03	7.4E-04
Acrolein	2.63E-03	7.0E-04
Benzene	1.58E-03	4.2E-04
1,3-Butadiene	6.63E-04	1.8E-04
Formaldehyde	2.05E-02	0.005
Methanol	3.06E-03	8.1E-04
Total PAH**	1.41E-04	3.7E-05
Toluene	5.58E-04	1.5E-04
Xylene	1.95E-04	5.2E-05
Total		0.01

HAP pollutants consist of the nine highest HAPs included in AP-42 Table 3.2-3.

**PAH = Polyaromatic Hydrocarbon (PAHs are considered HAPs, since they are considered Polycyclic Organic Matter)

Methodology

Emission Factors are from AP-42 (Supplement F, July 2000), Table 3.2-3

Potential Fuel Usage (MMBtu/yr) = [Maximum Output Horsepower Rating (hp)] * [Brake Specific Fuel Consumption (Btu/hp-hr)] / [1000000 Btu/MMBtu]

Potential Emissions (tons/yr) = [Potential Fuel Usage (MMBtu/yr)] * [Emission Factor (lb/MMBtu)] / [2000 lb/ton]

Greenhouse Gases (GHGs)	Greenhouse Gas (GHG)		
	CO2	CH4	N2O
Emission Factor in lb/MMBtu*	110	0.23	
Emission Factor in lb/MMcf**			2.2
Potential Emission in tons/yr	29.13	0.06	0.001
Summed Potential Emissions in tons/yr	29.20		
CO2e Total in tons/yr	30.59		

Methodology

*The CO2 and CH4 emission factors are from Emission Factors are from AP-42 (Supplement F, July 2000), Table 3.2-3

**The N2O emission factor is from AP 42, Table 1.4-2. The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.

Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

For CO2 and CH4: Emission (tons/yr) = [Potential Fuel Usage (MMBtu/yr)] * [Emission Factor (lb/MMBtu)] / [2,000 lb/ton]

For N2O: Emission (tons/yr) = [Potential Fuel Usage (MMCF/yr)] * [Emission Factor (lb/MMCF)] / [2,000 lb/ton]

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

Abbreviations

PM = Particulate Matter	NOx = Nitrous Oxides	CO2 = Carbon Dioxide
PM10 = Particulate Matter (<10 um)	VOC = Volatile Organic Compounds	CH4 = Methane
SO2 = Sulfur Dioxide	CO = Carbon Monoxide	N2O = Nitrous Oxide
		CO2e = CO2 equivalent emissions

Appendix A: Emissions Calculations
Estimated Landfill Gas (LFG) Emissions - Landfill 01

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Company Name: Camp Atterbury Joint Maneuver Training Center
Address City IN Zip: Hospital Road, Edinburgh, IN 46124
Permit Number: M081-31782-00042
Reviewer: Deena Patton

Total Landfill Gas Emitted (from LandGEM output)*			
Year	(Mg/year)	(m3/year)	(ft3/year)
2012	811	649,200	22,926,284

Compound	Molecular Weight ⁽²⁾	Median Concentration ⁽²⁾ (ppmv)	Emission Rate ⁽³⁾ (m ³ /yr)	Landfill Emission Rate ⁽⁴⁾ (kg/yr)	Emissions Before Collection (tpy)
Criteria Pollutants					
VOC ⁽¹⁾ (NMOC as hexane)	86.18	232.05	151	579	0.64
Other Regulated Pollutants					
NMOC (regulated under §111 [NSPS] of CAA)	86.18	595	386	1,485	1.6
Greenhouse Gas Emissions*					
Methane	16.04				239
Methane (as CO ₂ e)					5012
Biogenic CO ₂	44.01				655
Hazardous Air Pollutants (HAPs)					
1,1,1-Trichloroethane (methyl chloroform)	133.42	0.48	0.31	1.86	2.04E-03
1,1,2,2-Tetrachloroethane	167.85	1.11	0.72	5.40	0.01
1,1-Dichloroethane (ethylidene dichloride)	98.95	2.35	1.53	6.74	0.01
1,1-Dichloroethene (vinylidene chloride)	96.94	0.20	0.13	0.56	6.19E-04
1,2-Dichloroethane (ethylene dichloride)	98.96	0.41	0.27	1.18	1.30E-03
1,2-Dichloropropane (propylene dichloride)	112.98	0.18	0.12	0.59	6.49E-04
Acrylonitrile	53.06	6.33	4.11	9.73	0.01
Carbon disulfide	76.13	0.58	0.38	1.28	1.41E-03
Carbon tetrachloride	153.84	4.00E-03	2.60E-03	0.02	1.96E-05
Carbonyl sulfide	60.07	0.49	0.32	0.85	9.40E-04
Chlorobenzene	112.56	0.25	0.16	0.82	8.99E-04
Chloroethane (ethyl chloride)	64.52	1.25	0.81	2.34	2.58E-03
Chloroform	119.39	0.03	0.02	0.10	1.14E-04
Dichlorobenzene ⁽⁶⁾	147.00	0.21	0.14	0.89	9.86E-04
Dichloromethane (methylene chloride)	84.94	14.3	9.28	35.2	0.04
Ethyl benzene	106.16	4.61	2.99	14.2	0.02
Hexane	86.18	6.57	4.27	16.4	0.02
Mercury (total)	200.61	2.92E-04	1.90E-04	1.70E-03	1.87E-06
Methyl ethyl ketone	72.11	7.09	4.60	14.81	0.02
Methyl isobutyl ketone	100.16	1.87	1.21	5.43	0.01
Perchloroethylene (tetrachloroethylene)	166.83	3.73	2.42	17.92	0.02
Trichloroethylene (trichloroethene)	131.38	2.82	1.83	10.73	0.01
Vinyl chloride	62.5	7.34	4.77	13.29	0.01
Xylenes	106.16	12.1	7.86	37.21	0.04
Benzene	78.11	1.91	1.24	4.32	4.76E-03
Toluene	92.13	39.3	25.51	104.9	0.12
PTE of Total HAPs (tons/year)					0.34

NMOC = Non-Methane Organic Compounds

Notes:

* Total Landfill Gas calculated utilizing LandGEM Version 3.02. Data reported is for year 2012.

- VOC median concentration taken from Footnote e of Table 2.4-2, AP-42 Supplement E (November 1998), for sites without co-disposal. VOC mol. weight assumed to be the same as NMOC (as hexane).
- Values taken from Tables 2.4-1 and 2.4-2 of AP-42 Supplement E (November 1998).
- Values calculated using Equation 3 of AP-42 Supplement E (November 1998).
- Values calculated using Equation 4 of AP-42 Supplement E (November 1998).
- Control efficiencies for flares as indicated in Table 2.4-3 of AP-42 Supplement E (November 1998).
- Assumes dichlorobenzene exists in its para isomer state (the para isomer is a Title III-listed HAP).

Appendix A: Emissions Calculations
Estimated Landfill Gas (LFG) Emissions - Landfill 02

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Company Name: Camp Atterbury Joint Maneuver Training Center
Address City IN Zip: Hospital Road, Edinburgh, IN 46124
Permit Number: M081-31782-00042
Reviewer: Deena Patton

Total Landfill Gas Emitted (from LandGEM output)*			
Year	(Mg/year)	(m3/year)	(ft3/year)
2012	574	313,400	11,067,618

Compound	Molecular Weight ⁽²⁾	Median Concentration ⁽²⁾ (ppmv)	Emission Rate ⁽³⁾ (m ³ /yr)	Landfill Emission Rate ⁽⁴⁾ (kg/yr)	Emissions Before Collection (tpy)
Criteria Pollutants					
VOC ⁽¹⁾ (NMOC as hexane)	86.18	232.05	73	280	0.31
Other Regulated Pollutants					
NMOC (regulated under §111 [NSPS] of CAA)	86.18	595	186	717	0.8
Greenhouse Gas Emissions*					
Methane	16.04				230
Methane (as CO ₂ e)					4840
Biogenic CO ₂	44.01				632
Hazardous Air Pollutants (HAPs)					
1,1,1-Trichloroethane (methyl chloroform)	133.42	0.48	0.15	0.90	9.87E-04
1,1,2,2-Tetrachloroethane	167.85	1.11	0.3	2.61	2.87E-03
1,1-Dichloroethane (ethylidene dichloride)	98.95	2.35	0.7	3.25	3.58E-03
1,1-Dichloroethene (vinylidene chloride)	96.94	0.20	0.06	0.27	2.99E-04
1,2-Dichloroethane (ethylene dichloride)	98.96	0.41	0.13	0.57	6.25E-04
1,2-Dichloropropane (propylene dichloride)	112.98	0.18	0.06	0.28	3.13E-04
Acrylonitrile	53.06	6.33	2.0	4.70	0.01
Carbon disulfide	76.13	0.58	0.18	0.62	6.81E-04
Carbon tetrachloride	153.84	4.00E-03	1.25E-03	8.60E-03	9.49E-06
Carbonyl sulfide	60.07	0.49	0.15	0.41	4.54E-04
Chlorobenzene	112.56	0.25	0.08	0.39	4.34E-04
Chloroethane (ethyl chloride)	64.52	1.25	0.39	1.13	1.24E-03
Chloroform	119.39	0.03	0.01	0.05	5.52E-05
Dichlorobenzene ⁽⁶⁾	147.00	0.21	0.07	0.43	4.76E-04
Dichloromethane (methylene chloride)	84.94	14.30	4.48	16.99	0.02
Ethyl benzene	106.16	4.61	1.44	6.84	0.01
Hexane	86.18	6.57	2.06	7.92	0.01
Mercury (total)	200.61	2.92E-04	9.15E-05	8.19E-04	9.03E-07
Methyl ethyl ketone	72.11	7.09	2.22	7.15	0.01
Methyl isobutyl ketone	100.16	1.87	0.59	2.62	2.89E-03
Perchloroethylene (tetrachloroethylene)	165.83	3.73	1.17	8.65	0.01
Trichloroethylene (trichloroethene)	131.38	2.82	0.88	5.18	0.01
Vinyl chloride	62.5	7.34	2.30	6.42	0.01
Xylenes	106.16	12.10	3.79	17.96	0.02
Benzene	78.11	1.91	0.60	2.09	2.30E-03
Toluene	92.13	39.30	12.32	50.63	0.06
PTE of Total HAPs (tons/year)					0.16

NMOC = Non-Methane Organic Compounds

Notes:

* Total Landfill Gas calculated utilizing LandGEM Version 3.02. Data reported is for year 2012.

- VOC median concentration taken from Footnote e of Table 2.4-2, AP-42 Supplement E (November 1998), for sites without co-disposal. VOC mol. weight assumed to be the same as NMOC (as hexane).
- Values taken from Tables 2.4-1 and 2.4-2 of AP-42 Supplement E (November 1998).
- Values calculated using Equation 3 of AP-42 Supplement E (November 1998).
- Values calculated using Equation 4 of AP-42 Supplement E (November 1998).
- Control efficiencies for flares as indicated in Table 2.4-3 of AP-42 Supplement E (November 1998).
- Assumes dichlorobenzene exists in its para isomer state (the para isomer is a Title III-listed HAP).

**Attachment A: Emission Calculations
Surface Coating Booths PSB01 and PH01
VOC and Particulate**

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Company Name: Camp Atterbury Joint Maneuver Training Center
Source Address: Hospital Road, Edinburgh, IN 46124
Permit Number: M081-31782-00042
Reviewer: Deena Patton

PTE of PM/PM10/PM2.5 and VOC

Emission Unit	Material	Density (lb/gal)	Weight % Volatile (H2O & Organics)	Weight % Water + Non-VOC	Weight % VOC	Volume % Water + Non-VOC	Volume % Solids	Maximum Throughput (gal/week)	Maximum Throughput (gal/hr)	Pounds VOC per gallon of coating less water	VOC Content (lbs/gal)	PTE of VOC (lbs/hour)	PTE of VOC (lbs/day)	PTE of VOC (tons/yr)	PTE of PM/PM10/PM2.5 Before Control (tons/yr)	PTE of PM/PM10/PM2.5 After Control (tons/yr)	lb VOC/gal solids	Transfer Efficiency	Particulate Control Efficiency
PSB01	Brown 383	10.25	14.00%	49.0%	14.0%	53.9%	33.30%	1.0	5.95E-03	3.11	1.43	0.01	0.20	0.04	0.092	0.023	4.31	60%	75%
	Green 383	12.41	8.46%	36.5%	8.5%	54.4%	37.14%	1.0	5.95E-03	2.31	1.05	0.01	0.15	0.03	0.118	0.030	2.83	60%	75%
	37030 Black	10.54	10.43%	47.0%	10.4%	59.5%	29.03%	1.0	5.95E-03	2.71	1.10	0.01	0.16	0.03	0.098	0.025	3.79	60%	75%
PH01	PH01 is a small operation that is used for maintenance personnel. This unit typically coats items such as doors and plaques, items that maintenance can carry over to paint. The solvent used in this operation is purchased from home improvement stores on an as need basis and thus, IDEM has determined the emissions to be negligible.																		
Totals (worst case coatings)												0.01	0.20	0.04	0.12	0.030			

Methodology

Pounds of VOC per Gallon Coating less Water = [Density (lb/gal)] * [Weight % VOC] / [1 - Volume % water]
VOC Content (lbs/gal) = [Density (lb/gal)] * [Weight % VOC]
PTE of VOC (lbs/hour) = VOC Content (lbs/gal) * Maximum Throughput (gal/week)*1 week/168 hours
PTE of VOC (lbs/day)= PTE of VOC (lbs/hour) * 24 hours/1 day
PTE of VOC (tons/year) = [PTE of VOC (lbs/day)] * [365 days/yr] * [ton/2000 lbs]
Particulate Potential Tons per Year = (lbs/hour) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)

**Appendix A: Emission Calculations
Fuel Storage Tanks and Fuel Transfer and Dispensing
Volatile Organic Compound (VOC)**

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Company Name: Camp Atterbury Joint Maneuver Training Center
Source Address: Hospital Road, Edinburgh, IN 46124
Permit Number: M081-31782-00042
Reviewer: Deena Patton

Volatile Organic Compound (VOC) Emissions From Storage Tanks (Working and Breathing Losses) Using US EPA TANKS Version 4.09 program

VOC emissions from storage tanks were determined by using US EPA TANKS Version 4.09 program.

Storage Tank ID	Product Stored	Tank Type	Tank Color/Shade	Tank Dimensions	Maximum Liquid Volume (gallons)	Turnovers per year	Product Throughput (gallons/yr)	VOC Working Losses (lbs/yr)	VOC Breathing Losses (lbs/yr)	Total VOC Losses (lbs/yr)	VOC Working Losses (tons/yr)	VOC Breathing Losses (tons/yr)	Total VOC Losses (tons/yr)
VFD01	JP8*	UST/ Horizontal	White	10 feet x34 ft	20,000	13.50	270,000	4.04	0.00	4.04	0.002	0.000	0.002
VFD02	JP8*	UST/ Horizontal	White	8 ft x 26 ft	10,000	13.50	135,000	2.02	0.00	2.02	0.001	0.000	0.001
VFD03	JP8*	UST/ Horizontal	White	10 feet x34 ft	20,000	13.50	270,000	4.04	0.00	4.04	0.002	0.000	0.002
VFD04	Gas	UST/ Horizontal	White	8 ft x 26 ft	10,000	15.90	159,000	990.66	0.00	990.66	0.495	0.000	0.495
VFD05	Gas or Diesel	AST/ Horizontal	Gray	4 ft x 10 ft	1,000	ND**	ND**	ND**	ND**	ND**	ND**	ND**	ND**
VFD06	JP8	AST/ Horizontal	Gray	4 ft x 8.5 ft	750	1.00	750	0.02	0.28	0.29	0.00	0.00	0.00
VFD07	Gas	AST/ Horizontal	Gray	3 ft x 5.6 ft	250	1.00	250	1.87	96.41	98.28	0.00	0.05	0.05
VFD08	JP8*	AST/ Horizontal	Gray	4 ft x 10 ft	1,000	12.20	12,198	0.25	0.32	0.58	0.00	0.00	0.00
UOil1	Oil	AST/ Horizontal	Gray	4 ft x 5.4ft	500	3.30	1,650	0.00	0.00	0.00	0.00	0.00	0.00
UOil2	Oil	AST/ Horizontal	Gray	4ft x 5.4 ft	500	3.30	1,650	0.00	0.00	0.00	0.00	0.00	0.00
UOil3	Oil	UST/ Horizontal	White	4 ft x 10 ft	1,000	0.73	725	0.00	0.00	0.00	0.00	0.00	0.00
UOil4	Oil	UST/ Horizontal	White	4 ft x 10 ft	1,000	0.73	725	0.00	0.00	0.00	0.00	0.00	0.00
UOil5	Oil	UST/ Horizontal	White	4 ft x 10 ft	1,000	0.85	850	0.00	0.00	0.00	0.00	0.00	0.00
Totals										1099.9		0.55	

negl. = negligible

*JP8 is jet fuel which is comparable to diesel fuel

**ND = Not Determined. Emissions from VFD05 are already accounted for through the other tanks. This tank holds only off-specification fuel that are found in the other tanks.

Gasoline Fuel Transfer and Dispensing Operation

To calculate evaporative emissions from the gasoline dispensing fuel transfer and dispensing operation emission factors from AP-42 Chapter 5.2 Transportation And Marketing Of Petroleum Liquids were used. The total potential emission of VOC is as follows:

Gasoline Throughput = $\frac{2,321.0}{847.17}$ gallons/day
kgal/yr

Emission Source	Emission Factor (lb/kgal of throughput)*	PTE of VOC (tons/yr)
Filling storage tank (splash filling)	11.50	4.87
Tank breathing and emptying**	1.00	0.42
Vehicle refueling (displaced losses - uncontrolled)	11.00	4.66
Spillage	0.70	0.30
Total		10.25

Methodology

*Emission Factors from AP-42 Chapter 5.2 Transportation And Marketing Of Petroleum Liquids (dated 6/08), Table 5.2-7

**Includes any vapor loss between underground tank and gas pump

The gasoline throughput was provided by the source.

Gasoline Throughput (kgal/yr) = [Gasoline Throughput (gallons/day)] * [365 days/yr] * [kgal/1000 gal]

PTE of VOC (tons/yr) = [Gasoline Throughput (kgal/yr)] * [Emission Factor (lb/kgal)] * [ton/2000 lb]

PTE of HAP (tons/yr) = [HAP Content of Gasoline (% by weight)] * [PTE of VOC (tons/yr)]

Abbreviations

VOC = Volatile Organic Compounds

PTE = Potential to Emit

HAP = Hazardous Air Pollutant

**Appendix A: Emission Calculations
Fuel Storage Tanks and Fuel Transfer and Dispensing
Hazardous Air Pollutants (HAPs)**

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**Company Name: Camp Atterbury Joint Maneuver Training Center
Source Address: Hospital Road, Edinburgh, IN 46124
Operation Permit No.: M081-31782-00042
Permit Reviewer: Deena Patton**

Product Stored	Storage Tanks	Total PTE of VOC (tons/yr)	PTE of Total HAPs (tons/yr)	PTE of Worst Single HAP (tons/yr)	Worst Single HAP	PTE of Hexane (tons/yr)	
Gasoline	VFD04,	0.54	0.14	0.05	Xylenes	0.01	Hexane
Diesel	VFD02, VFD03, VFD06, VFD08	0.005	7.1E-05	2.7E-05	Xylenes	0.0	Hexane
Oil	UOI1, UOI2, UOI3, UOI4, UOI5	0.0	0.0	0.0	Chrysene	0.0	Hexane
Totals			0.142	0.049	Xylenes	0.01	Hexane

Hazardous Air Pollutant (HAP) Content (% by weight) For Various Petroleum Mixtures

	CAS#	Hazardous Air Pollutant (HAP) Content (% by weight)* For Various Petroleum Mixtures			
		Gasoline	Kerosene	Diesel (#2) Fuel Oil	No. 6 Fuel Oil
Volatile Organic HAP					
1,3-Butadiene	106-99-0	3.70E-5%			
2,2,4-Trimethylpentane	540-84-1	2.40%			
Acenaphthene	83-32-9		4.70E-5%		
Acenaphthylene	208-96-8		4.50E-5%		
Anthracene	120-12-7		1.20E-6%	5.80E-5%	5.00E-5%
Benzene	71-43-2	1.90%		2.90E-4%	
Benzo(a)anthracene	56-55-3			9.60E-7%	5.50E-4%
Benzo(a)pyrene	50-32-8			2.20E-6%	4.40E-5%
Benzo(g,h,i)perylene	191-24-2			1.20E-7%	
Biphenyl	92-52-4			6.30E-4%	
Chrysene	218-01-9			4.50E-7%	6.90E-4%
Ethylbenzene	100-41-4	1.70%		0.07%	
Fluoranthene	206-44-0		7.10E-6%	5.90E-5%	2.40E-4%
Fluorene	86-73-7		4.20E-5%	8.60E-4%	
Indeno(1,2,3-cd)pyrene	193-39-5			1.60E-7%	1.00E-4%
Methyl-tert-butylether	1634-04-4	0.33%			
Naphthalene	91-20-3	0.25%	0.31%	0.26%	4.20E-5%
n-Hexane	110-54-3	2.40%			
Phenanthrene	85-01-8		8.60E-6%	8.80E-4%	2.10E-4%
Pyrene	129-00-0		2.40E-6%	4.60E-5%	2.30E-5%
Toluene	108-88-3	8.10%		0.18%	
Total Xylenes	1330-20-7	9.00%		0.50%	
Total Organic HAPs		26.08%	0.33%	1.29%	0.19%
Worst Single HAP		9.00%	0.31%	0.50%	0.07%
		Xylenes	Naphthalene	Xylenes	Chrysene

Methodology

**Source: Petroleum Liquids. Potter, T.L. and K.E. Simmons. 1998. Total Petroleum Hydrocarbon Criteria Working Group Series, Volume 2. Composition of Petroleum Mixtures.

The Association for Environmental Health and Science. Available on the Internet at: <http://www.aehsfoundation.org/Publications.aspx>

PTE of Total HAPs (tons/yr) = [Total HAP Content of Petroleum Mixture (% by weight)] * [PTE of VOC (tons/yr)]

PTE of Worst Single HAP (tons/yr) = [Worst Single HAP Content of Petroleum Mixture (% by weight)] * [PTE of VOC (tons/yr)]

Abbreviations

VOC = Volatile Organic Compounds

PTE = Potential to Emit

HAP = Hazardous Air Pollutant

Appendix A: Emissions Calculations
Welding and Thermal Cutting

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Company Name: Camp Atterbury Joint Maneuver Training Center
Address City IN Zip: Hospital Road, Edinburgh, IN 46124
Permit Number: M081-31782-00042
Reviewer: Deena Patton

PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)	Max. electrode consumption per station (lbs/day)	Max. electrode consumption per station (lbs/year)	EMISSION FACTORS* (lb pollutant/lb electrode)				EMISSIONS (lbs/hr)				HAPS (lbs/hr)
WELDING					PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
Submerged Arc(WEL01)	1	0.00008	0.0019	0.70	0.036	0.011			2.9E-06	8.8E-07	0	0	0.000
Submerged Arc(WEL03)	1	0.00041	0.0099	3.60	0.036	0.011			1.5E-05	4.5E-06	0	0	0.000
Metal Inert Gas (MIG)(carbon steel)(WEL02)	1	0.00089	0.0214	7.8	0.0055	0.0005			4.9E-06	4.5E-07	0	0	0.000
Metal Inert Gas (MIG)(carbon steel)(WEL04)	1	0.00041	0.0099	3.6	0.0055	0.0005			2.3E-06	2.1E-07	0	0	0.000
Metal Inert Gas (MIG)(carbon steel)(WEL05)	1	0.00089	0.0214	7.8	0.0055	0.0005			4.9E-06	4.5E-07	0	0	0.000
Metal Inert Gas (MIG)(carbon steel)(WEL06)	1	0.00089	0.0214	7.8	0.0055	0.0005			4.9E-06	4.5E-07	0	0	0.000
Metal Inert Gas (MIG)(carbon steel)(WEL07)	1	0.00237	0.0570	20.8	0.0055	0.0005			1.3E-05	1.2E-06	0	0	0.000
Metal Inert Gas (MIG)(carbon steel)(WEL08)	1	0.00119	0.0285	10.4	0.0055	0.0005			6.5E-06	5.9E-07	0	0	0.000
Metal Inert Gas (MIG)(carbon steel)(WEL09)	1	0.00237	0.0569	20.8	0.0055	0.0005			1.3E-05	1.2E-06	0	0	0.000
Metal Inert Gas (MIG)(carbon steel)(WEL10)	1	0.00024	0.0058	2.1	0.0055	0.0005			1.3E-06	1.2E-07	0	0	0.000
Metal Inert Gas (MIG)(carbon steel)(WEL11)	1	0.00059	0.0142	5.2	0.0055	0.0005			3.3E-06	3.0E-07	0	0	0.000
Metal Inert Gas (MIG)(carbon steel)(WEL13)	1	0.00089	0.0214	7.8	0.0055	0.0005			4.9E-06	4.5E-07	0	0	0.000
Metal Inert Gas (MIG)(carbon steel)(WEL14)	1	0.00089	0.0214	7.8	0.0055	0.0005			4.9E-06	4.5E-07	0	0	0.000
Metal Inert Gas (MIG)(carbon steel)(WEL32)	1	0.00059	0.0142	5.2	0.0055	0.0005			3.3E-06	3.0E-07	0	0	0.000
Stick (E7018 electrode)(WEL12)	1	0.00030	0.0071	2.6	0.0211	0.0009			6.3E-06	2.7E-07	0	0	0.000
Stick (E7018 electrode)(WEL15)	1	0.00006	0.0014	0.5	0.0211	0.0009			1.2E-06	5.1E-08	0	0	0.000
FLAME CUTTING	Number of Stations	Max. Metal Thickness Cut (in.)	Max. Metal Cutting Rate (in./minute)	Max. Metal Cutting Rate (in./hour)	EMISSION FACTORS (lb pollutant/1,000 inches cut, 1" thick)**				EMISSIONS (lbs/hr)				HAPS (lbs/hr)
					PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
Oxyacetylene(WEL16)	1	0.375	12	720	0.1622	0.0005	0.0001	0.0003	0.044	0.000	0.000	0.000	0.000
Oxyacetylene(WEL17)	1	0.375	12	720	0.1622	0.0005	0.0001	0.0003	0.044	0.000	0.000	0.000	0.000
Oxyacetylene(WEL19)	1	0.375	12	720	0.1622	0.0005	0.0001	0.0003	0.044	0.000	0.000	0.000	0.000
Oxyacetylene(WEL21)	1	0.375	12	720	0.1622	0.0005	0.0001	0.0003	0.044	0.000	0.000	0.000	0.000
Oxyacetylene(WEL23)	1	0.375	12	720	0.1622	0.0005	0.0001	0.0003	0.044	0.000	0.000	0.000	0.000
Oxyacetylene(WEL24)	1	0.375	12	720	0.1622	0.0005	0.0001	0.0003	0.044	0.000	0.000	0.000	0.000
Oxyacetylene(WEL26)	1	0.375	12	720	0.1622	0.0005	0.0001	0.0003	0.044	0.000	0.000	0.000	0.000
Oxyacetylene(WEL27)	1	0.375	12	720	0.1622	0.0005	0.0001	0.0003	0.044	0.000	0.000	0.000	0.000
Oxyacetylene(WEL28)	1	0.375	12	720	0.1622	0.0005	0.0001	0.0003	0.044	0.000	0.000	0.000	0.000
Oxyacetylene(WEL30)	1	0.375	12	720	0.1622	0.0005	0.0001	0.0003	0.044	0.000	0.000	0.000	0.000
Oxyacetylene(WEL31)	1	0.375	12	720	0.1622	0.0005	0.0001	0.0003	0.044	0.000	0.000	0.000	0.000
Oxyacetylene(WEL33)	1	0.375	12	720	0.1622	0.0005	0.0001	0.0003	0.044	0.000	0.000	0.000	0.000
Oxyacetylene (WEL34)	1	0.375	12	720	0.1622	0.0005	0.0001	0.0003	0.044	0.000	0.000	0.000	0.000
Plasma**(WEL18)	1	0.5	3.6	216	0.0039				0.000	0.000	0.000	0.000	0.000
Plasma**(WEL20)	1	0.5	2.4	144	0.0039				0.000	0.000	0.000	0.000	0.000
Plasma**(WEL22)	1	0.5	2.4	144	0.0039				0.000	0.000	0.000	0.000	0.000
Plasma**(WEL25)	1	0.5	2.4	144	0.0039				0.000	0.000	0.000	0.000	0.000
Plasma**(WEL29)	1	0.5	2.4	144	0.0039				0.000	0.000	0.000	0.000	0.000
EMISSION TOTALS													
Potential Emissions lbs/hr									0.57	0.00	0.00	0.00	0.00
Potential Emissions lbs/day									13.70	0.04	0.01	0.03	0.08
Potential Emissions tons/year									2.50	0.01	0.00	0.00	0.01

Methodology:

*Emission Factors are default values for carbon steel unless a specific electrode type is noted in the Process column.

**Emission Factor for plasma cutting from American Welding Society (AWS). Trials reported for wet cutting of 8 mm thick mild steel with 3.5 m/min cutting speed (at 0.2 g/min emitted). Therefore, the emission factor for plasma cutting is for 8 mm thick rather than 1 inch, and the maximum metal thickness is not used in calculating the emissions.

Using AWS average values: (0.25 g/min)/(3.6 m/min) x (0.0022 lb/g)/(39.37 in./m) x (1,000 in.) = 0.0039 lb/1,000 in. cut, 8 mm thick

Plasma cutting emissions, lb/hr: (# of stations)/(max. cutting rate, in./min.)/(60 min./hr.)(emission factor, lb. pollutant/1,000 in. cut, 8 mm thick)

Cutting emissions, lb/hr: (# of stations)(max. metal thickness, in.)(max. cutting rate, in./min.)/(60 min./hr.)(emission factor, lb. pollutant/1,000 in. cut, 1" thick)

Welding emissions, lb/hr: (# of stations)(max. lbs of electrode used/hr/station)(emission factor, lb. pollutant/lb. of electrode used)

Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day

Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/year x 1 ton/2,000 lbs.

Attachment A: Emission Calculations
Natural Gas-Fired Combustion Units

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Company Name: Camp Atterbury Joint Maneuver Training Center
Source Address: Hospital Road, Edinburg, IN 46124
Permit Number: M081-31782-00042
Reviewer: Deena Patton

Boilers

Building	Unit	Number of Units	Heat Input Capacity (MMBtu/hr)	Year Installed	Boiler or Direct-Fire Heater
Training Institute	Series #7.0	1	1.01	1996	Boiler
Training Institute	Series #9.4	1	0.81	1996	Boiler
Conference Center	2-95938	1	0.14025	2004	Boiler
Conference Center	2-95942	1	0.14025	2004	Boiler
King's Hall	95939	1	1.26	2004	Boiler
King's Hall	95932	1	0.28	2004	Boiler
CAMCCO	223517	1	4.2	2005	Boiler
CAMCCO	223518	1	4.2	2005	Boiler
CAMCCO	G-05-0277	1	1.00	2005	Boiler
CAMCCO	G-05-0278	1	1.00	2005	Boiler
Firehouse	G06H00189330	1	0.5	2006	Boiler
Range Control	A20P02815	1	0.3	2009	Boiler
Totals		12	14.84		

Heaters

Building	Unit	Number of Units	Heat Input Capacity (MMBtu/hr)	Year Installed	Boiler or Direct-Fire Heater
Troop Medical Center	17936429	1	0.13	Unknown	Heater
Troop Medical Center	EBEA66M4N00134	1	0.125	2005	Heater
Troop Medical Center	EBEA66M4N00135	1	0.30	2005	Heater
Troop Medical Center	5907B01447	1	0.132	2004	Heater
Troop Medical Center	5907B01446	1	0.132	2004	Heater
CAMCCO	505115644	1	0.656	2005	Heater
Training Institute	K11H00237332	1	0.99999	2011	Heater
Training Institute	0605F05383	1	0.275	1995	Heater
Training Institute	C943240	1	0.1	2000	Heater
Training Institute	L942132	1	0.75	2000	Heater
Training Institute	RRG00212G01149	1	0.35	2012	Heater
Training Institute	RRG00212G01063	1	0.35	2012	Heater
Training Institute	RRG00212G01061	1	0.35	2012	Heater
Training Institute	RRG00212G01060	1	0.35	2012	Heater
Welcome Center	LO6M006576	1	0.1999	2006	Heater
Welcome Center	LO6M006580	1	0.1999	2006	Heater
Range Control	MA98-0011639-234	1	0.042	1992	Heater
DPW	H09H10102018	1	0.285	2010	Heater
DPW	BJ083VIN01414CAMV7	1	0.470325	2010	Heater
DPW	BJD79Y2N40989X	1	0.175	2010	Heater
DPW	BJD79Y2N40987X	1	0.175	2010	Heater
DPW	BJD79Y2N4098	1	0.175	2010	Heater
DPW	BJE79Y2N47299X	1	0.131	2010	Heater
DPW	BJE79Y2N40988X	1	0.175	2010	Heater
DPW	BJE79Y2N47298X	1	0.131	2010	Heater
DPW	BJE79Y2N47300X	1	0.175	2010	Heater
DPW	BJE79Y2N47298X	1	0.131	2010	Heater
DPW	BJK79Y2N67395X	1	0.175	2010	Heater
DPW	BJE79Y2N47301X	1	0.131	2010	Heater
DPW	BJD80U2N41206X	1	0.075	2010	Heater
DPW	BJD80U2N41198X	1	0.075	2010	Heater
New D-FAC	0803DIVE935680004	1	0.15	2011	Heater
New D-FAC	0803DIVE935680003	1	0.15	2011	Heater
New D-FAC	0803DIVE935680002	1	0.15	2011	Heater
New D-FAC	0803DIVE935680001	1	0.15	2011	Heater
New D-FAC	153P031870629-1	1	0.075	2011	Heater
New D-FAC	153P031812404-1	1	0.075	2011	Heater
New D-FAC	154H031818574-1	1	0.075	2011	Heater
New D-FAC	153P031870627-1	1	0.075	2011	Heater
Gym	WH0351966	1	0.25	2000	Heater
Gym	55604E03874	1	0.47	Unknown	Heater
Medical Administration	749100310D	1	0.4	2007	Heater
DOL	ST-98-4044	1	0.1	Unknown	Heater
DOL	ST-98-4033	1	0.1	Unknown	Heater
PX	ANS Z2147	1	0.165	1987	Heater
PX	EJ5D707F449903495	1	0.12	1998	Heater
PX	5904J31731	1	0.11	Unknown	Heater
DOL-M Automotive	S6003A72243	1	0.115	Unknown	Heater
DOL-M Automotive	S6003A60869	1	0.115	Unknown	Heater
PDTE-MRAP	BNCA-056034	1	0.18	2011	Heater
PDTE-MRAP	BKC79H2U92726X	1	0.2	2011	Heater
PDTE-MRAP	BKC79U2N82747X	1	0.2	2011	Heater
PDTE-MRAP	BKC79U2N82791X	1	0.2	2010	Heater
PDTE-MRAP	BKC79U2N827	1	0.2	2010	Heater
UTES Warehouse	A080857789	1	0.125	2009	Heater
UTES Warehouse	A08057747	1	0.125	2009	Heater
UTES Warehouse	BJH79Y2N59163X	1	0.06	2010	Heater
UTES Warehouse	ATA31K6ND03548	1	0.2	1994	Heater
UTES Warehouse	ATA31K6ND03549	1	0.2	1994	Heater
JSTEC Area Warehouse	0311-027-080-0101	1	0.08	2003	Heater
JSTEC Area Warehouse	0401-027-080-0056	1	0.08	2003	Heater
JSTEC Area Warehouse	0311-027-080-0097	1	0.08	2003	Heater
JSTEC Area Warehouse	0401-027-080-0055	1	0.08	2003	Heater
JSTEC Area Warehouse	0311-027-080-0098	1	0.08	2003	Heater
JSTEC Area Warehouse	0311-027-080-0094	1	0.08	2003	Heater
JSTEC Area Warehouse	0401-027-080-0054	1	0.08	2003	Heater
JSTEC Area Warehouse	0311-027-080-0087	1	0.08	2003	Heater
JSTEC Area Warehouse	0502-027-080-0003	1	0.08	2003	Heater
JSTEC Area Warehouse	0311-027-080-0095	1	0.08	2003	Heater
JSTEC Area Warehouse	0311-027-080-0102	1	0.08	2003	Heater
JSTEC Area Warehouse	0311-027-080-0095	1	0.08	2003	Heater
JSTEC Area Warehouse	0311-0207-080-0093	1	0.08	2003	Heater
JSTEC Area Warehouse	AE4721639	1	0.07	Unknown	Heater
Conference Center	AC445440	1	0.07	Unknown	Heater
King's Hall	E04H00164625	1	0.99	2004	Heater
Airfield	AUC31K5N24159	1	0.05	1995	Heater
Airfield	AVT31K5N60094	1	0.05	1996	Heater
Airfield	MM96-0027753-230	1	0.04	1992	Heater
Airfield	M052RK27G	1	0.1	Unknown	Heater
Airfield	L512NL47G	1	0.1	Unknown	Heater
Firehouse	CJ8189512	1	0.199999	2004	Heater
Various	470 heaters located in various buildings/locations at the site	470	51.48	2004	Heater
Totals		481	66.65		

Attachment A: Emission Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Natural Gas-Fired Boilers

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Company Name: Camp Atterbury Joint Maneuver Training Center
Source Address: Hospital Road, Edinburgh, IN 46124
Permit Number: M081-31782-00042
Reviewer: Deena Patton

Unit	Maximum Heat Input Capacity (MMBtu/hr)	High Heat Value (MMBtu/MMscf)	Potential Throughput (MMcf/yr)
Total Natural Gas-Fired Boilers	14.84	1020	127.45

Criteria Pollutants	Pollutant						
Emission Factor in lb/MMcf	PM* 1.9	PM10* 7.6	PM2.5* 7.6	SO2 0.6	NOx 100 **see below	VOC 5.5	CO 84
Potential Emission in tons/yr	0.12	0.48	0.48	0.038	6.37	0.35	5.35

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined. PM2.5 assumed equal to PM10

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Hazardous Air Pollutants	HAPs - Organics*					HAPs - Metals*				
	Benzene	DCB	Formaldehyde	Hexane	Toluene	Pb	Cd	Cr	Mn	Ni
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	1.338E-04	7.647E-05	4.780E-03	1.147E-01	2.167E-04	3.186E-05	7.010E-05	8.922E-05	2.422E-05	1.338E-04

*The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Potential to Emit Total HAPs (tons/year) = 0.12

Greenhouse Gases (GHGs)	Greenhouse Gas (GHG)		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120000	2.3	2.2
Potential Emission in tons/yr	7647.22	0.15	0.14
Summed Potential Emissions in tons/yr	7647.51		
CO2e Total in tons/yr	7693.76		

Methodology

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64

Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.

Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

Abbreviations

PM = Particulate Matter

PM10 = Particulate Matter (<10 um)

SO2 = Sulfur Dioxide

NOx = Nitrous Oxides

VOC = Volatile Organic Compounds

CO = Carbon Monoxide

DCB = Dichlorobenzene

Pb = Lead

Cd = Cadmium

Cr = Chromium

Mn = Manganese

Ni = Nickel

CO2 = Carbon Dioxide

CH4 = Methane

N2O = Nitrous Oxide

CO2e = CO2 equivalent emissions

Attachment A: Emission Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Natural Gas-Fired Heaters

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Company Name: Camp Atterbury Joint Maneuver Training Center
Source Address: Hospital Road, Edinburgh, IN 46124
Permit Number: M081-31782-00042
Reviewer: Deena Patton

Unit	Maximum Heat Input Capacity (MMBtu/hr)	High Heat Value (MMBtu/MMscf)	Potential Throughput (MMcf/yr)
Total Natural Gas-Fired Heaters	66.65	1020	572.41

Criteria Pollutants	Pollutant						
Emission Factor in lb/MMcf	PM* 1.9	PM10* 7.6	PM2.5* 7.6	SO2 0.6	NOx 100 **see below	VOC 5.5	CO 84
Potential Emission in tons/yr	0.54	2.18	2.18	0.172	28.62	1.57	24.04

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined. PM2.5 assumed equal to PM10

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Hazardous Air Pollutants	HAPs - Organics*					HAPs - Metals*				
	Benzene	DCB	Formaldehyde	Hexane	Toluene	Pb	Cd	Cr	Mn	Ni
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	6.010E-04	3.434E-04	2.147E-02	5.152E-01	9.731E-04	1.431E-04	3.148E-04	4.007E-04	1.088E-04	6.010E-04

*The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Potential to Emit Total HAPs (tons/year) = 0.54

Greenhouse Gases (GHGs)	Greenhouse Gas (GHG)		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120000	2.3	2.2
Potential Emission in tons/yr	34344.42	0.66	0.63
Summed Potential Emissions in tons/yr	34345.70		
CO2e Total in tons/yr	34553.43		

Methodology

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64

Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.

Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

Abbreviations

PM = Particulate Matter

PM10 = Particulate Matter (<10 um)

SO2 = Sulfur Dioxide

NOx = Nitrous Oxides

VOC = Volatile Organic Compounds

CO = Carbon Monoxide

DCB = Dichlorobenzene

Pb = Lead

Cd = Cadmium

Cr = Chromium

Mn = Manganese

Ni = Nickel

CO2 = Carbon Dioxide

CH4 = Methane

N2O = Nitrous Oxide

CO2e = CO2 equivalent emissions

Appendix A: Emission Calculations
LPG-Propane - Industrial Boilers
(Heat input capacity: > 10 MMBtu/hr and < 100 MMBtu/hr)

Page 15 of 16 TSD App A

Company Name: Camp Atterbury Joint Maneuver Training Center
Address City IN Zip: Hospital Road, Edinburgh, IN 46124
Permit Number: M081-31782-00042
Reviewer: Deena Patton

Heat Input Capacity
MMBtu/hr
23.157

Potential Throughput
kgals/year
2217.00

SO₂ Emission factor = 0.10 x S
S = Sulfur Content = 0.50 grains/100ft³

	Pollutant						
	PM*	PM10*	direct PM2.5**	SO ₂	NO _x	VOC	CO
Emission Factor in lb/kgal	0.2	0.7	0.7	0.1 (0.10S)	13.0	1.0 **TOC value	7.5
Potential Emission in tons/yr	0.22	0.78	0.78	0.06	14.41	1.11	8.31

*PM emission factor is filterable PM only. PM emissions are stated to be all less than 10 microns in aerodynamic equivalent diameter, footnote in Table 1.5-1, therefore PM10 is based on the filterable and condensable PM emission factors.

** No direct PM2.5 emission factor was given. Direct PM2.5 is a subset of PM10. If one assumes all PM10 to be all direct PM2.5, then a worst case assumption of direct PM2.5 can be made.

**The VOC value given is TOC. The methane emission factor is 0.2 lb/kgal.

Methodology

1 gallon of LPG has a heating value of 94,000 Btu

1 gallon of propane has a heating value of 91,500 Btu (use this to convert emission factors to an energy basis for propane)

(Source - AP-42 (Supplement B 10/96) page 1.5-1)

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.0915 MMBtu

Emission Factors are from AP42 (7/08), Table 1.5-1 (SCC #1-02-010-02)

Propane Emission Factors shown. Please see AP-42 for butane.

Emission (tons/yr) = Throughput (kgals/yr) x Emission Factor (lb/kgal) / 2,000 lb/ton

See Page 2 for Greenhouse Gas calculations.

lpgpi.xls 9/95kaw
updated 7/11

Appendix A: Emission Calculations
LPG-Propane - Industrial Boilers
(Heat input capacity: > 10 MMBtu/hr and < 100 MMBtu/hr)

Page 16 of 16 TSD App A

Greenhouse Gas

Company Name: Camp Atterbury Joint Maneuver Training Center
Address City IN Zip: Hospital Road, Edinburgh, IN 46124
Permit Number: M081-31782-00042
Reviewer: Deena Patton

	Greenhouse Gas		
Emission Factor in lb/kgal	CO2 12,500	CH4 0.2	N2O 0.9
Potential Emission in tons/yr	13,856	0.22	1.00
Summed Potential Emissions in tons/yr	13,857		
CO2e Total in tons/yr	14,170		

Methodology

The CO2 Emission Factor for Propane is 12500. The CO2 Emission Factor for Butane is 14300.

Emission Factors are from AP 42 (7/08), Table 1.5-1 (SCC #1-02-010-02)

Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

lpgpi.xls 9/95kaw

updated 7/11



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

April 4, 2013

1 Lt Jerry D Hartley
Camp Atterbury Joint Maneuver Training Center
PO Box 5000, Bldg 609 Environmental
Edinburgh, IN 46124-5000

Re: Public Notice
Camp Atterbury Joint Maneuver Training Center
Permit Level: New Construction MSOP
Permit Number: 081 - 31782 - 00042

Dear 1 Lt Hartley:

Enclosed is a copy of your draft New Construction MSOP, Technical Support Document, emission calculations, and the Public Notice which will be printed in your local newspaper.

The Office of Air Quality (OAQ) has submitted the draft permit package to the Johnson County Public Library, 401 South State in Franklin IN; Bartholomew Co Public Library, 536 Fifth St. in Columbus IN; and Brown Co Public Library, 205 Locust Lane, P.O. Box 8 in Nashville IN. As a reminder, you are obligated by 326 IAC 2-1.1-6(c) to place a copy of the complete permit application at this library no later than ten (10) days after submittal of the application or additional information to our department. We highly recommend that even if you have already placed these materials at the library, that you confirm with the library that these materials are available for review and request that the library keep the materials available for review during the entire permitting process.

You will not be responsible for collecting any comments, nor are you responsible for having the notice published in the newspaper. The OAQ has requested that the Daily Journal in Franklin, In and The Republic in Columbus, In publish this notice no later than April 9, 2013.

Please review the enclosed documents carefully. This is your opportunity to comment on the draft permit and notify the OAQ of any corrections that are needed before the final decision. Questions or comments about the enclosed documents should be directed to Deena Patton, Indiana Department of Environmental Management, Office of Air Quality, 100 N. Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, and ask for extension 4-5400 or dial (317) 234-5400.

Sincerely,

Len Pogost

Len Pogost
Permits Branch
Office of Air Quality

Enclosures
PN Applicant Cover letter. dot 3/27/08



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ATTENTION: PUBLIC NOTICES, LEGAL ADVERTISING

April 3, 2013

Daily Journal
Attn: Classifieds
P.O. Box 699
Franklin, Indiana 46131

Enclosed, please find one Indiana Department of Environmental Management Notice of Public Comment for Camp Atterbury Joint Maneuver Training Center, Johnson County, Indiana.

Since our agency must comply with requirements which call for a Notice of Public Comment, we request that you print this notice one time, no later than April 9, 2013.

Please send a notarized form, clippings showing the date of publication, and the billing to the Indiana Department of Environmental Management, Accounting, Room N1345, 100 North Senate Avenue, Indianapolis, Indiana, 46204.

We are required by the Auditor's Office to request that you place the Federal ID Number on all claims. If you have any conflicts, questions, or problems with the publishing of this notice or if you do not receive complete public notice information for this notice, please call Len Pogost at 800-451-6027 and ask for extension 3-2803 or dial 317-233-2803.

Sincerely,
Len Pogost

Len Pogost
Permit Branch
Office of Air Quality

Permit Level: New Construction MSOP
Permit Number: 081 - 31782 - 00042

Enclosure
PN Newspaper.dot 3/27/08



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Governor

Thomas W. Easterly
Commissioner

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Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
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ATTENTION: PUBLIC NOTICES, LEGAL ADVERTISING

April 3, 2013

The Republic
Attn: Classifieds
333 Second Street
Columbus, Indiana 47201

Enclosed, please find one Indiana Department of Environmental Management Notice of Public Comment for Camp Atterbury Joint Maneuver Training Center, Bartholomew County, Indiana.

Since our agency must comply with requirements which call for a Notice of Public Comment, we request that you print this notice one time, no later than April 9, 2013.

Please send a notarized form, clippings showing the date of publication, and the billing to the Indiana Department of Environmental Management, Accounting, Room N1345, 100 North Senate Avenue, Indianapolis, Indiana, 46204.

We are required by the Auditor's Office to request that you place the Federal ID Number on all claims. If you have any conflicts, questions, or problems with the publishing of this notice or if you do not receive complete public notice information for this notice, please call Len Pogost at 800-451-6027 and ask for extension 3-2803 or dial 317-233-2803.

Sincerely,
Len Pogost

Len Pogost
Permit Branch
Office of Air Quality

Permit Level: New Construction MSOP
Permit Number: 081 - 31782 - 00042

Enclosure
PN Newspaper.dot 3/27/08



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Commissioner

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Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
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April 4, 2013

To: Brown Co Public Library

From: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Subject: **Important Information to Display Regarding a Public Notice for an Air Permit**

Applicant Name: Camp Atterbury Joint Maneuver Training Center
Permit Number: 081 - 31782 - 00042

Enclosed is a copy of important information to make available to the public. This proposed project is regarding a source that may have the potential to significantly impact air quality. Librarians are encouraged to educate the public to make them aware of the availability of this information. The following information is enclosed for public reference at your library:

- Notice of a 30-day Period for Public Comment
- Request to publish the Notice of 30-day Period for Public Comment
- Draft Permit and Technical Support Document

You will not be responsible for collecting any comments from the citizens. Please refer all questions and request for the copies of any pertinent information to the person named below.

Members of your community could be very concerned in how these projects might affect them and their families. **Please make this information readily available until you receive a copy of the final package.**

If you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185. Questions pertaining to the permit itself should be directed to the contact listed on the notice.

Enclosures
PN Library.dot 03/27/08



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Indianapolis, Indiana 46204
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April 4, 2013

To: Bartholomew Co Public Library

From: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Subject: **Important Information to Display Regarding a Public Notice for an Air Permit**

Applicant Name: Camp Atterbury Joint Maneuver Training Center
Permit Number: 081 - 31782 - 00042

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April 4, 2013

To: Johnson County Public Library

From: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Subject: **Important Information to Display Regarding a Public Notice for an Air Permit**

Applicant Name: Camp Atterbury Joint Maneuver Training Center
Permit Number: 081 - 31782 - 00042

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- Request to publish the Notice of 30-day Period for Public Comment
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Enclosures
PN Library.dot 03/27/08



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Indianapolis, Indiana 46204
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www.idem.IN.gov

Notice of Public Comment

April 4, 2013

**Camp Atterbury Joint Maneuver Training Center
081 - 31782 - 00042**

Dear Concerned Citizen(s):

You have been identified as someone who could potentially be affected by this proposed air permit. The Indiana Department of Environmental Management, in our ongoing efforts to better communicate with concerned citizens, invites your comment on the draft permit.


Enclosed is a Notice of Public Comment, which has been placed in the Legal Advertising section of your local newspaper. The application and supporting documentation for this proposed permit have been placed at the library indicated in the Notice. These documents more fully describe the project, the applicable air pollution control requirements and how the applicant will comply with these requirements.

If you would like to comment on this draft permit, please contact the person named in the enclosed Public Notice. Thank you for your interest in the Indiana's Air Permitting Program.

Please Note: *If you feel you have received this Notice in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at PPEAR@IDEM.IN.GOV. If you have recently moved and this Notice has been forwarded to you, please notify us of your new address and if you wish to remain on the mailing list. Mail that is returned to IDEM by the Post Office with a forwarding address in a different county will be removed from our list unless otherwise requested.*

Enclosure
PN AAA Cover.dot 3/27/08


Mail Code 61-53

IDEM Staff	LPOGOST 4/4/2013 Camp Atterbury Joint Maneuver Training Center 081 - 31782 - 00042 draft Johnson co		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	 Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: CERTIFICATE OF MAILING ONLY	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handling Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee
											Remarks
1		1 Lt Jerry D Hartley Camp Atterbury Joint Maneuver Training Center PO Box 5000, Bldg 609 Environmental Edinburgh IN 46124-5000 (Source CAATS)									
2		Colonel Ivan Denton Garrison Commander Camp Atterbury Joint Maneuver Training Center PO Box 5000, Bldg 1 Edinburgh IN 46124-5000 (RO CAATS)									
3		Johnson County Public Library 401 South State Franklin IN 46131 (Library)									
4		Johnson County Commissioners 5 East Jefferson Franklin IN 46131 (Local Official)									
5		Johnson County Health Department 86 W. Court St, Courthouse Annex Franklin IN 46131-2345 (Health Department)									
6		Frederick & Iva Moore 6019 W 650 N Ligonier IN 46767 (Affected Party)									
7		Larry and Becky Bischoff 10979 North Smokey Row Road Mooresville IN 46158 (Affected Party)									
8		Greenwood City Council and Mayors Office 2 N. Madison Ave. Greenwood IN 46142 (Local Official)									
9											
10											
11											
12											
13											
14											
15											

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Mail Code 61-53

IDEM Staff	LPOGOST 4/4/2013 Camp Atterbury 081 - 31782 - 00042 bartholomew co. (draft)			AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: CERTIFICATE OF MAILING ONLY	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handling Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee	Remarks
1		Elbert 734 Hutchins Columbus IN 47201 (Affected Party)										
2		Mr. Lcnfc 1039 Sycamore St Columbus IN 47201 (Affected Party)										
3		Bartholomew Co Public Library 536 Fifth St. Columbus IN 47201-6225 (Library)										
4		Bartholomew County Commissioners 440 Third Street Columbus IN 47202 (Local Official)										
5		Mr. Jean Terpstra 3210 Grove Pkwy Columbus IN 47203 (Affected Party)										
6		August Tindell 31 Reo Street Columbus IN 47201 (Affected Party)										
7		Terry Lowe 1039 W Jeffersons St Apt 3 Franklin IN 46131 (Affected Party)										
8		Mr. Charles Mitch 3210 Grove Parkway Columbus IN 47203 (Affected Party)										
9		Bartholomew County Health Department 440 3rd Street, Suite 303 Columbus IN 47201 (Health Department)										
10												
11												
12												
13												
14												
15												

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See Domestic Mail Manual R900, S913, and S921 for limitations of coverage on inured and COD mail. See International Mail Manual for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
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Mail Code 61-53

IDEM Staff	LPOGOST 4/4/2013 Camp Atterbury 081 - 31782 - 00042 -Brown County Contacts (draft)			AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: CERTIFICATE OF MAILING ONLY	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handling Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee
											Remarks
1		Brown Co Public Library 205 Locust Lane, P.O. Box 8 Nashville IN 47448-0008 (Library)									
2		Brown County Health Department County Office Building, P.O. Box 281 Nashville IN 47448-0281 (Health Department)									
3		Nashville Town Council and Town Manager P.O. Box 446 Nashville IN 47448 (Local Official)									
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See Domestic Mail Manual R900, S913, and S921 for limitations of coverage on inured and COD mail. See International Mail Manual for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
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